





A B C

OF THE

Swedish System of Educational Gymnastics.

A PRACTICAL HAND-BOOK FOR SCHOOL
TEACHERS AND THE HOME.

BY

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WITH 77 ILLUSTRATIONS



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PREFACE.

DURING my many years of experience as a teacher of gymnastics I have been asked numerous questions which, to a professional man, seem so simple that he often forgets to answer them satisfactorily.

The same is true of most treatises on Swedish gymnastics. The science and theory are often very skillfully treated; but the most common questions are not answered, and the practical work, which should serve as a guide to the inexperienced teacher, is stuffed with scientific terms and shortened words and sentences. So it happens that the teacher becomes confused or even wholly averse to the subject as one requiring too much of his precious time.

Since the Swedish system of educational gymnastics has been introduced into the public schools of Boston, it has become a necessity to have a practical hand-book, both for the teachers and the many homes where gymnastics are practiced. Wherefore, I have tried to furnish a book which will give plain answers to the most frequent questions; prescriptions of exercises for children of different ages, from the third class in primary schools up to the first class in grammar schools; with full commands for each exercise, and illustrated by cuts.

The cuts are copied from the works of well-known authors in Sweden and Norway,—Liedbeck, Norlander, Balck, and Björnstad,—and I believe they will make it very easy for anybody to see how the exercises should be done.

I believe the Swedish system of gymnastics to be the best for schools and homes; but I believe, also, that gymnasiums, colleges, and universities would find a combination system better suited to their peculiar needs. I hope to be able to arrange a book with a full description of such a combination system.

At present a practical hand-book of the Swedish system of educational gymnastics to guide the teachers is most necessary, and I therefore offer this book to the public.

HARTVIG NISSEN.

BOSTON, MASS., August 17, 1891.

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EXPLANATORY NOTES.

NOTE I.—The teacher should study the Day's Order which he (or she) is to teach so he knows it by heart, or he may write it on a small card to be used as a memorandum.

NOTE II.—In arranging the children for gymnastic exercises in class-rooms, place the shortest ones in front and the tallest behind. Let the child stand between the seats (and not between the desks), but have first, third, fifth, and seventh row four inches in front of second, fourth, and sixth row. This will give all room necessary, both for arm and leg exercises.

NOTE III.—The Swedish mode of facings are: Turn on the left heel and right toe to the left, and on the right heel and left toe to the right, in two counts. For instance: *Left—face!* Raise the left ball of foot and the right heel and turn 90 degrees to the left side, let the left ball and toes sink and keep the balance on the whole left foot, steadied by the right toe. At *Two!* place the right foot in to the left (heels together, toes out, 90 degrees). Keep a perfect balance all through.

THE SWEDISH SYSTEM
OF
EDUCATIONAL GYMNASTICS.

CHAPTER I.

I. GYMNASTICS IN GENERAL.

What are gymnastics ?

Systematic bodily exercises.

What are systematic exercises ?

Exercises based on scientific principles and founded on physiological rules, and on esthetical and psychological truth. There must be a reason for every movement.

How many kinds of gymnastics are there ?

Four kinds, viz.: Medical, Educational, Military, and Esthetical gymnastics.

What are Medical gymnastics ?

Exercises—either passive, assistive, active, or resistive—prescribed by a physician or medical gymnast, with a view of restoring health to diseased parts, or to develop certain parts of the body.

What are Educational gymnastics ?

Active or resistive exercises performed in classes, at the command of a teacher, with a view of educating the mind and body.

What are Military gymnastics ?

Exercises which have a strictly military purpose.

What are Esthetical gymnastics ?

Active exercises performed either after music or command, with a special view of producing graceful postures and an easy and graceful body.

Will all these gymnastics be considered in this book ?

No. Only the Educational gymnastics.

II. EDUCATIONAL GYMNASTICS.

What is the object of Educational gymnastics ?

First. By movements suitable to the human organism, and, step by step, leading out from each other to develop the body and to produce strength and health.

Second. By increasing the strength of the body and by endurance and skill to develop freshness of mind, powerful will, resoluteness, and courage.

Third. To assist the school in its educational work, by making the pupil accustomed to strict attention, quick and exact execution of given orders ; to master his own will, and to subordinate himself as a part of a great totality.

How are these results obtained ?

Thereby that the lessons are constructed after a certain rule with progressive movements, and that the pupils from the beginning are accustomed to execute all exercises with precision, earnestness, and with full power.

Will such lessons always have good results ?

No.

What else, then, is necessary ?

That the instruction be quick and lively, without dullness, so that the exercises will be refreshing both to mind and body.

III. THE BEST KIND OF EDUCATIONAL GYMNASTICS.

Are there more than one kind of Educational gymnastics ?

Yes. But in this book the Swedish system only is considered.

Why ?

Because it is the best arranged for use in school-rooms.

What makes it better than other systems ?

First. Its "Day's Order" and Progression.

Second. Because it gives a full, systematic exercise without the use of apparatus.

What is Day's Order ?

The programme according to which a lesson is laid out.

What is Progression ?

A steady growth from the minimum of a thing—or exercise—to the maximum.

IV. ON GYMNASTIC APPARATUS.

Does no other system of gymnastics give full systematic exercise without apparatus ?

No. All other systems employ some kind or another of apparatus.

Is it not necessary to use apparatus ?

No. Not for the sake of education, strength, and health.

When, then ?

For the sake of variety, skill, courage, and special development.

Do we always receive good results from exercise without apparatus ?

No.

When are good results obtained ?

When the exercises are taught by a careful and interested teacher and performed in a correct manner by interested pupils.

CHAPTER II.

ON SWEDISH EDUCATIONAL GYMNASTICS.

I. ARRANGEMENT.

How are Swedish educational gymnastics arranged ?

In three parts, viz :—

First. Order and Marching exercises.

Second. The Real gymnastic exercises, which are divided into (a) Introductory movements and (b) Principal movements.

Third. Gymnastic Games.

What are Order and Marching exercises ?

Exercises given to draw the pupils' attention away from their study and to the gymnastic lesson,—to make the class in order and ready for the Real gymnastics.

What are Introductory movements ?

They are the *positions* and simplest or *primary* Leg, Arm, Head, and Trunk movements.

What are Principal movements ?

They are stronger and more difficult movements, and have a special effect on the different parts of the body, and are classified and named thereafter.

What are Gymnastic Games ?

Running plays, wrestling, pulling ropes, dancing, etc.

Give some examples of Order and Marching exercises.

Fall in! Attention! Right (or forward)—dress! Right (or left)—face! One step forward—march! Two steps to right—march! Count by—twoes! Open ranks—march!

II. POSITIONS.**Is it necessary to stand in correct position when exercising?**

Yes; absolutely. The correct fundamental and starting positions are the chief points to be considered in the Swedish system of gymnastics, and they *must* be maintained all through the exercise.

Why?

Because all the movements are based on the shape of the human body in correct position; when all the different parts are in harmony with each other.

What would be the result of exercises performed in an incorrect position?

A disfigured body. A more or less contracted chest and stooping head and shoulders, with consequently undeveloped lungs. This will hinder the free and easy respiration and the circulation of the blood. Curvature of the spine may also be the result of incorrect positions.

What are the positions?

The Fundamental position and a number of Starting positions derived from it.

How is the Fundamental position?

1. Heels together, with toes turned out so as to make a right angle (90 degrees) between the feet.

2. Knees straight, without any strain.
3. Hips even in the same plane and drawn well back so as to keep the abdomen in.
4. The chest raised well forward and expanded.
5. The shoulders even in the same plane, drawn back without being pushed up and without stiffness.
6. The arms hanging down to the sides in straight line from shoulder to tip of fingers; palms in toward the thigh, but not on the front of it.
7. The head raised even on the shoulders and chin drawn in.
8. Eyes looking straight forward.
9. The weight of the body on the balls of the feet, maintaining a perfect balance. (Fig. 1.)

Why shall the feet be in 90 degrees toward each other?

Because it gives a better and broader base, and it makes it easier to take other positions in outward and backward-outward directions.

What reason is there for keeping the rest of the body in the named positions?

The shape of the human frame, which in a natural state demands these positions; if otherwise, it will be unnatural.

What are the Starting positions?

1. Close. 2. Stride. 3. Forward—walk. 4. Outward—walk. 5. Forward—fall out. 6. Outward—fall



FIG. 1.

out. 7. Hips—firm. 8. Neck—firm. 9. Arms—upward—bend. 10. Arms—forward—bend. 11. Arms—half forward—bend. 12. Arms—sideways. 13. Arms—forward. 14. Arms—upward.

What does Close mean ?

That the feet are no longer in 90 degrees toward each other, but parallel and close to each other. (Fig. 2.)

What is the command for this position ?

Feet—close! and, to resume fundamental position,
Feet—open!



FIG. 2.

How is it done ?

By raising the toes and balls of the feet and turning them on the heels without bending the body.

Is this also used as an exercise ?

Yes. As a Leg and Correcting exercise.

Why is it a Leg exercise ?

Because the muscles of the leg are brought into active play.

What good is there in Leg exercises ?

They draw the blood from the upper parts of the body down toward the feet, thereby equalizing the circulation of the blood, and they also strengthen the muscles of the legs.

Why is Feet—close a Correcting exercise ?

Because it draws the pupils' attention to the position of the feet, and it teaches them to keep the feet in the correct position.

When shall this exercise be used?

Whenever the teacher notices that the position of the feet is incorrect.

What does Stride mean?

That the feet are braced apart with a distance of two feet's length between the heels, still maintaining the direction of 90 degrees toward each other. (Fig. 3.)

What is the command for this position?

Feet—sideways—place! and, to resume fundamental position, Feet—together—place!

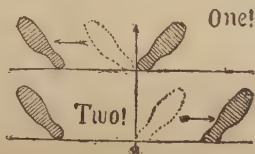


FIG. 3.

How is it done?

In two counts. On the first count the left foot is placed one foot's distance straight to the left side, and on the second count the right foot is placed one foot's distance straight to the right side. The knees are kept straight and the body is balanced evenly on both legs. (Fig. 3.) When placed together the left foot is first placed back to its former place, then the right.

Is this also used as an exercise?

Yes; as a Leg exercise for beginners.

What does Forward—walk mean?

That one foot is placed *straight forward* with a distance of two feet between the heels, still maintaining

the direction of 90 degrees toward each other. The body is balanced evenly on both legs. (Fig. 4.)

What is the command for this position?

Left (or right) foot—forward—place! and, to resume fundamental position, Left (or right) foot—replace!

This is also used as a Leg exercise for beginners.

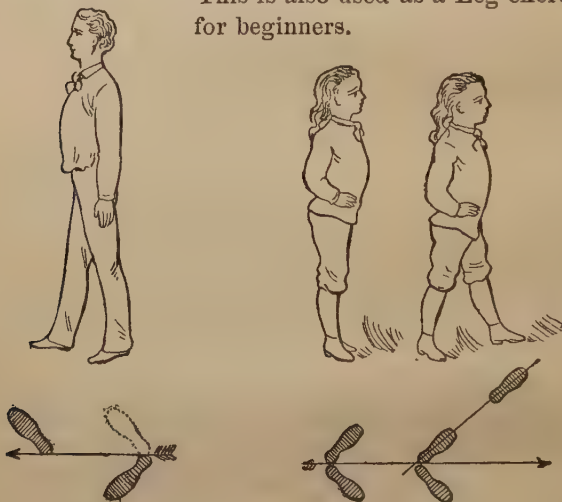


FIG. 4.

FIG. 5.

What does Outward—walk mean?

That one foot is placed *outward*, in the direction of its toes,—straight between forward and sideways (oblique),—with a distance of two feet between the heels, still maintaining the direction of 90 degrees toward the feet, the body balanced evenly on both legs, and square to the front without being twisted. (Fig. 5.)

What is the command for this position?

Left (or right) foot—outward—place! and, to resume fundamental position, Left (or right) foot—replace! Also used as Leg exercise for beginners.

What does Forward—fall out mean?

That one foot is placed *straight forward* with a distance of *three* feet between the heels, the feet maintaining the direction of 90 degrees toward each other. The front knee is bent to a right angle; the body *at once* thrown forward so as to make a straight line with the back and backward leg, which is kept straight. The chest well forward and square to the front. The head well up and chin in. (Fig. 6.)

What is the command for this position?

Left (or right)—forward—fall out! and, to resume fundamental position, Position! This is also a Leg exercise, besides being a Starting position for a number of other exercises.



FIG. 6.

What does Outward—fall out mean?

That one foot is placed *outward* in the direction of its toes (oblique) with a distance of *three* feet between the heels, the feet still in 90 degrees toward each other. The front knee is bent to a right angle and kept well out over the toes; the body *at once* thrown over the front knee so as to make a straight line with the back and backward leg, which is kept straight. The chest well forward and square to the front, without twisting

the body. The head well up, chin in, and eyes looking straight forward. (Fig. 7.)

What is the command for this position ?

Left (or right)—outward—fall out! and, to resume fundamental position, Position! This is a Leg exercise as well as a Starting position.

What does Hips—firm mean ?

That the hands are placed on the waist with a full grip over the hip-bone; the thumb behind and the four other fingers together, in front, pointing slightly downward; the wrist kept straight.



FIG. 7.



FIG. 8.

one line from the elbow to the middle finger; the shoulders maintaining the fundamental position; the elbows pointing sideways, *slightly* backward; chest well forward. (Fig. 8.)

What is the command for this position ?

Hips—firm! and, to resume fundamental position, Position!

How is it done ?

The hands are drawn quickly up and placed firmly on the hips without jerk.

What is it good for ?

1. It makes it easier to keep the balance.

2. It isolates the abdomen from the upper trunk, so that exercises can be better confined to the special parts wanted.

3. It supports the respiratory muscles, thereby making the respiration freer.

Why shall the thumb be behind and the other fingers in front ?

If it be reversed the upper arm will be rotated forward, thus pushing the shoulders forward and compressing the chest.

Why shall the wrist be straight ?

Because, by keeping it straight it is impossible to bring the elbow too far back, which, otherwise, is a common fault. Besides, it is as easy to maintain a full grip over the hips in this manner as in others, and it looks better.

Is this an exercise ?

Yes. It is an easy Arm exercise for beginners, besides being one of the most used Starting positions.

What does Neck—firm mean ?

That the hands are placed on the neck, fingers meeting behind ; the shoulders and arms drawn well back ; the chest expanded, and the head remaining erect. If

position is right, the muscles of the arm, neck, and shoulders will feel contracted. (Fig. 9.)

What is the command for this position ?

Neck—firm! and, to resume fundamental position, Position!

How is it done ?

The hands are quickly raised *sideways* and placed behind the neck without moving the head or trunk. The arms and shoulders are carried backward *at once*, and not after the hands have been placed on the neck.



FIG. 9.

What is it good for ?

1. It expands the chest more than in other positions.

2. It allows the blood to flow easier to the arm, because it extends the axillary artery.

3. It makes exercises performed in this position more powerful than in some other positions on account of its longer lever and because it is harder to maintain.

Why shall the arms and shoulders be drawn back ?

Because otherwise they will push the head forward and compress the chest.

Is this an exercise ?

Yes. It is a good Shoulder-blade exercise.

What does Arms—upward—bend mean ?

That the fore-arms are bent in the elbow-joint as far as possible up to the upper-arm and rotated *outward*;

the semi-flexed fingers pointing toward the shoulders; the upper-arms close to the body. (Fig. 10.)

What is the command for this position ?

Arms—upward—bend ! and, to resume fundamental position, Position !

How is it done ?

The fore-arms are rotated outward and bent in the elbow-joint with moderate speed and an *even* movement, without any jerking ; the upper-arms are kept *close and immovable* to the body. The fingers are slightly bent and pointed toward the shoulders—not toward the chest.



FIG. 10.

What is it good for ?

It is the Starting position for all arm extensions; and it is an easy Arm exercise for beginners.



FIG. 11.

What does Arms—forward—bend mean ?

That the upper-arms are raised horizontally *sideways*, with the fore-arms sharply bent upon them in the *front*; hands, fingers, wrists, and fore-arms in one line, and in height with the upper-arm and shoulder; the palm of hand turned downward; the shoulders kept well back, so as not to allow the fingers to meet in front; neither must the thumb touch the chest. If done right, the chest will feel expanded and the muscles of the back contracted. (Fig. 11.)

What is the command for this position ?

Arms—forward—bend ! and, to resume fundamental position, Position !

What is it good for ?

It expands the chest and is the Starting position for several Back and Side movements. It is also an Arm movement for beginners.

What does Arms—half forward—bend mean ?

That the upper-arms are raised horizontally *sideways*, with the fore-arms bent to a right angle in the elbow-joint; hands, fingers, wrists, and fore-arms in one line *straight forward*, and in height with the upper-arm and shoulder; palms turned toward each other; shoulders well back. (Fig. 12.)



FIG. 12.

What is the command for this position ?

Arms—half forward—bend! and, to resume fundamental position, Position!

How is it done ?

The arms, bent to 90 degrees at the elbows, are raised quickly sideways to the height of the shoulders, which are drawn well back.

What is it good for ?

It expands the chest; it is a Shoulder-blade movement, and it is a Starting position for many powerful Back movements.

What does Arms—sideways mean?

That the arms are raised horizontally *sideways*, and kept in a straight line from shoulder to tips of fingers; shoulders well back; palms of hands down. (See Fig. 36.)

What is the command for this position?

Arms—sideways—raise! and, to resume fundamental position, Arms—downward—sink! It can also be commanded: Arms—sideways—stretch! and Arms—downward—stretch!

How is it done?

1. Arms—sideways—raise is done by raising the *fully extended* arms from the shoulder *straight up sideways* to the height of the shoulder, without any bending.

2. Arms—sideways—stretch is done by first making Arms—upward—bend, and from that position stretching the arms quickly out sideways.

What is it good for?

1. It is an Arm movement and broadens the chest.

2. It extends the axillary artery to some extent, and therefore makes the flow of blood easier to the arm.

3. It makes a longer lever, and thereby adds more power to exercises performed in this position.

What does Arms—forward mean?

That the arms are raised horizontally *forward* and kept in a straight line from shoulder to tips of fingers, —parallel with each other; palms of the hands turned toward each other. (Fig. 14.)



FIG. 14.

What is the command for this position ?

Arms—forward—raise ! and Arms—downward—sink ! Or, Arms—forward—stretch ! and Arms—downward—stretch !

How is it done ?

1. Arms—forward—raise is done by raising the *fully extended* arms from the shoulders straight up *forward* to the height of the shoulders without any bending. The trunk must be kept perfectly still and not bent backward, pushing the shoulders and abdomen forward, which is a common fault in this exercise.



FIG. 15.

2. Arms—forward—stretch is done by first making Arms—upward—bend, and from this position stretching the arms quickly *forward* parallel with each other; the head, trunk, and legs immovable.

What is it good for ?

It is an Arm movement and gives exercise to the chest-muscles, and it lengthens the lever for other exercises.

What does Arms—upward mean ?

That the arms are in a *perpendicular* position—in *straight* line from shoulders to tips of fingers—above the head ; the shoulders and arms drawn well back to the ears and parallel with each other ; palms of the hands turned toward each other. The head must be kept erect and trunk and legs straight. (Fig. 15.)

What is the command for this position ?

Arms—forward and upward—raise ! Or, Arms—sideways and upward—raise ! Or, Arms—upward—stretch !

How is it done?

1. Arms—forward and upward—raise is done by raising the *fully extended* arms from the shoulders *straight* up in *front* till they are perpendicular on the shoulders.

2. Arms—sideways and upward—raise is done by raising the *fully extended* arms from the shoulders *straight* up at the *sides*, when horizontally the palms of the hands are turned upward and the arms are raised until they stand perpendicular on the shoulders.

3. Arms—upward—stretch is done by first making Arms—upward—bend, and from this position the arms are stretched quickly up alongside the ears.

What is it good for?

1. It gives the longest lever for other exercises.

2. It is a good Arm movement and elevates the chest.

3. It extends the axillary artery.

Are these all the positions?

No; but all other positions are leading out from or derived from them.

Are all exercises performed in these positions?

Yes; and in two or more of them combined.

III. PRIMARY MOVEMENTS AND COMMANDING WORDS.

What is a command?

A command consists of two parts:—

First. The *preparatory*, describing the exercise with loud, distinct, and moderately slow voice; and

Second. The *executory*, which gives the time when the exercise is to be done: in a sharp, short voice, if

the movement shall be quick, and with a lingering voice if it shall be done slowly.

Are the exercises never to be performed at the Preparatory command?

No. The pupils should not move a muscle before the last Executory word has been said.

Is this without exception?

There is only *one* exception, viz.: About—face! which here is taught after the United States Army regulations.

Which are the Executive words?

Attention! Position! Dress! Front! Face! March! Halt! Close! Open! Place! Fall out! Raise! Fling! Sink! Bend! Stretch! Circling! Rotate! Twist! Jump! Rest!

What does Attention mean?

1. If in the beginning of the lesson, or, the class is in Resting position, it means *straighten* up to *fundamental* position.

2. Otherwise it means *be attentive* to what is coming; listen to the teacher, but do not change the position in which you are, until otherwise commanded.

What does Position mean?

It means that, in whatever position the pupils may be, they shall resume the *fundamental* position as *quick* as possible.

Can Attention and Position be used alternately?

No. They have two different meanings.

What does Dress mean ?

Look in direction commanded and see that the line is straight.

How many Dresses are there ?

Three : Right (or left)—dress ! From the middle—dress ! Forward—dress ! (Fig. 16.)

What does Front mean ?

Look straight forward.

What does Face mean ?

Turn the whole body to right or left, without changing place.

How many Faces are there ?

Three : Right (or left)—face !
Half-right (or left)—face ! About—face !

How are they executed ?

1. Right (or left)—face is done by raising the *right* foot and turning 90 degrees on the *left* heel to the commanded side, and then placing the right foot in to the left, maintaining the right angle toward the feet.

2. Half-right (or left)—face is done in the same manner, only turning half-way, or 45 degrees, to the commanded side.

3. About—face is done in two counts. When the word *About* is said, the right foot is placed three inches behind the left foot, and the feet are turned so that the left foot points straight forward and the right foot is in a right angle toward the left. When *Face* is said, the *right* foot is raised and a turn of 180 degrees from



FIG. 16.

the front is done to the *right* side on the *left* heel, when the right foot is placed in to the left, maintaining 90 degrees between the feet. (Fig. 17.) All these Facings are done on the left heel to either side, About—face always to the right side.

Are these Swedish modes of Facing ?

No. They are United States Army regulations.

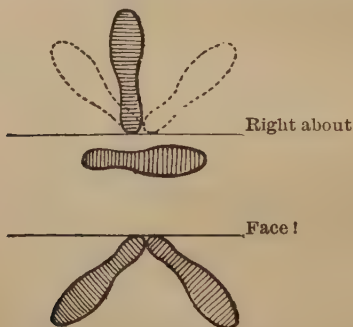


FIG. 17.

Are they any better than the Swedish ?

No. They are *one-sided*, and make it more difficult to keep the balance.

Why are they used here, then ?

Because the children and especially all boys know it, and in military drill will have to do it that way. And as the School gymnastics will not be able to change the Army regulations, it is better to use them and keep out of too much confusion.

What does March mean ?

Start to walk or to run.

How shall we start?

Always with the *left* foot.

What does Halt mean?

Stop walking or running.

How is that done?

1. Walking is stopped in *two* counts. On the *first* count *one* step is taken after the word *Halt* has been said, and on the *second* count the other foot is placed alongside the front foot, maintaining 90 degrees toward each other.

2. Running or quick-time—march is stopped in *four* counts. *Three* short steps are taken after the word *Halt*, and on the *fourth* count the backward foot is placed alongside the front one, in fundamental position.

What does Close and Open mean?

To take the close-standing position and to resume fundamental position.

What does Place mean?

To take the Stride or Walk standing positions.

What does Fall out mean?

To take the Forward or Outward *Fall-out* positions.

Are there other directions than Forward and Outward?

Yes. Sideways, Outward backward, and Backward.

What do these words mean?

1. Sideways means in a straight line to the side.

2. Outward backward means oblique backward, between sideways and straight backward. For instance: the *left* foot is placed outward backward to the left in the direction of the *right* heel.

3. Backward means straight backward.

What does Raise mean?

That the part prescribed is lifted straight up in the direction commanded.

Give some examples of Raise.

Heels—raise! Toes—raise! Leg—raise! Arms—raise! Head—raise! Trunk—raise!

How are these exercises performed?

1. Heels—raise is done by lifting both heels as high up as possible, still *keeping them together*, and without



FIG. 18.



FIG. 19.

bending the knees or body. This should, as a rule, be done quickly. (Fig. 18.)

2. Toes—raise is done by lifting the toes and ball of the foot as high as possible without bending the body or losing the balance.

3. Leg—raise is done by lifting the whole leg in direction prescribed, from the hip, with knee straight and toes pointed. A slow movement. (Fig. 19.)

4. Arms—raise is done by lifting the whole arm, in

direction prescribed, from the shoulder, with elbow, wrist, and fingers straight. Slow movement.

5. Head—raise is done by straightening head up from its bent position to the fundamental. Slow movement.

6. Trunk—raise is done by resuming the fundamental position of the trunk when it is bent to either side. As a rule, slow.

What does Fling mean?

It means to throw or to raise the arms in a very quick manner.

Give some examples of Fling.

1. Arms—forward and upward—fling! When the arms are raised as quick as possible straight forward and upward until they are perpendicular on the shoulders. From Arms—forward—bend command.

2. Arms—sideways—fling! When they are thrown or stretched quickly out sideways to Arms-sideways position without moving the upper arms. (Fig. 20.) From Arms—forward command.

3. Arms—sideways—fling! When the *straight* arms are thrown sideways to Arms-sideways position, keeping the shoulder well back, chest well forward, and head up.

What does Sink mean?

To resume the fundamental position with the raised heels, toes, legs, or arms in the same manner that they were raised.



FIG. 20.

What does Bend mean?

To flex a joint.

Give some examples of Bend.

Foot—bend! Knees—bend! Knee—upward—bend!
Arms—upward—bend! Arms—forward—bend! Head
—backward—bend! Head—sideways—bend! Trunk—
backward—bend! Trunk—forward—bend! Trunk—
sideways—bend!

How are these exercises done?

1. Foot—bend is done by flexing the ankle-joint, raising the toes up



FIG. 21.



FIG. 22.

toward the knee, while the leg is raised up from the ground.

2. Knees—bend is done by bending the knees to a right angle (90 degrees) when standing on tip-toes. The knees must be kept well out to point over the corresponding toes, and the heels together; the back straight, and chest well forward; head up. (Fig. 21.)

3. Knee—upward—bend is done by raising the thigh horizontally forward so that it makes a right angle with the hip; the leg hanging perpendicularly down, making

a right angle in the knee-joint; the toes pointed down. (Fig. 22.)

4. Arms—upward—bend and

5. Arms—forward—bend are already described.

6. Head—backward—bend is done by flexing the head slowly backward, without pushing the chin forward or changing the position of body. (Fig. 23.)

7. Head—sideways—bend is done by flexing the head slowly to the side, without twisting it or moving the shoulders or trunk.



FIG. 23.

8. Trunk—backward—bend is done by flexing the trunk backward, making an *even curve* of the whole spine from



FIG. 24.

the neck to the small of the back. The head must not be kept forward nor be bent to a strained position backward; it shall follow the movement in line with the curved spine. The knees must be kept straight. (Fig. 24.) This exercise has the effect of straightening the neck and back and arching the chest forward, but it should be done slowly and never so far as to produce an uncomfortable feeling of strain or backache.

9. Trunk—forward—bend is done by flexing the

trunk forward in the hips, keeping the shoulders and head well back and the chest well forward. (Fig. 25.) This exercise strengthens the muscles of the back and also arches the chest forward. It should be done slowly.

The two exercises Trunk—forward— and Trunk—backward— bend may very well be used alternately.

10. Trunk—sideways—bend is done by flexing the trunk to the side, curving the whole spine, without twisting; head following the movement, without pushing up the shoulders; legs straight.

(Fig. 26.) This exercise has a very



FIG. 25.



FIG. 26.

excellent effect on the circulation of the blood, and strengthens the muscles of the waist. For beginners it is done slowly, but may after awhile change in quickness.

What does Stretch mean?

Stretch means an *extension* of a *flexed* joint; consequently it is necessary to *bend* before we can *stretch*.

Give examples of Stretch.

Foot—stretch! Knees—stretch! Leg—forward—stretch! Leg—backward—stretch! Arms—forward, sideways, upward, backward, and downward—stretch!

How are these exercises done?

1. Foot—stretch is done by extending the already *bent* foot. Foot—bend and stretch are generally done alternately.

2. Knees—stretch is done by extending the already *bent* knees. There should be commanded Knees—bend! before they can be stretched.

3. Leg forward—stretch is done by extending the leg forward after the knee has been *bent upward*. (Fig. 27.)

4. Leg—backward—stretch



FIGS. 27 AND 28.

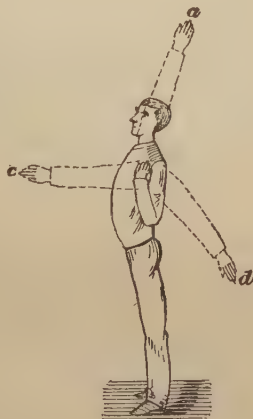


FIG. 29.

is done by extending the leg backward after the knee has been *bent upward*. (Fig. 28.)

5. Arms—forward, sideways, upward, backward, and downward—stretch are *always* done in two counts each. On the first count the arms are bent upward: Arms—upward—bend! On the second count the arms are extended quickly and sharply in the direction commanded, without moving the rest of the body. (Fig. 29.) The

command is Arms—forward (or other direction)—stretch!

Why do we not Stretch the head and trunk from a Bent position?

Because *stretch* indicates an exercise performed quickly and with force; and as the head and trunk resume fundamental positions from a *bent* position in a slow and quiet manner, we prefer to use the command of *Raise* for these parts of the body.

What does Circling mean?

To move the part prescribed in a circle.

Give some examples of Circling.

Foot—circling. Arm—circling. Head—circling. Trunk—circling.

How are these exercises done?

1. Foot—circling is done by moving the foot around in the ankle-joint, when the leg is raised up from the ground. This limbers and strengthens the joint.

2. Arm—circling is done by moving the arms around in the shoulder-joint, when in Arms-sideways position. They should always be moved in a circle upward, backward, downward, and forward, and not reverse. A Respiratory movement.

3. Head—circling is done by moving the head slowly around in a circle with an even movement, without twisting or jerking; first to the left side, then as many times to the other side. The shoulders, as also the rest of the body, are kept steady. (Fig. 30.) Especially good for the circulation.

4. Trunk—circling is done by moving the trunk slowly

around from the waist, describing as large a circle as possible; first to the left side, then as many times to the other side. The trunk must not be twisted, but be square to the front; the chest well expanded; the hips, shoulders, and head steady; the legs straight. (Fig. 31.) This has a very good effect on the circulation of the blood and the digestive organs.

What does Rotation mean?

To turn the parts described around its long axis.



FIG. 30.



FIG. 31.

Give examples of Rotation.

Leg—rotation. Arm—rotation.

How are these exercises done?

1. Leg—rotation is done by turning the forward-raised leg inward and outward as far as possible in the hip-joint, without bending the knee or ankle; the hips and rest of the body steady. This strengthens the hip and thigh.

2. Arm—rotation is done by turning the sideways-

raised or half-forward-bent arms as far as possible in both directions in the shoulder-joint; the shoulders and rest of the body steady. A good Shoulder-blade movement.

What does Twist mean?

It means Torsion of the head or trunk.

How are these exercises done?

1. Head—to left (or right)—twist is done by turning the head to the side as far as convenient, without any bending of the neck. The shoulders and rest of the body perfectly still. (Fig. 32.)



FIG. 32.



FIG. 33.

2. Trunk—to left (or right)—twist is done by turning the trunk from *above* the waist as far as possible to the side, *without moving the hips* or changing the position of the legs, and without any bending. Head square to the chest; shoulders well back; chest expanded. (Fig. 33.)

What does Jump mean?

That the body is suddenly thrown up in the air, away from the ground (or floor), and shall come down on the feet; either at the same place or in direction prescribed.

What kind of Jumps are used here ?

In place—jump! With turning—in place—jump!
From place—forward—jump! From place—backward—
jump! With one step—forward—jump! Feet—sideways
place—with a jump!

How are these exercises done ?

1. In place—jump is done in six counts. On *one*, heels—raise; on *two*, knees—bend; on *three*, the knees and ankles are quickly stretched and the whole body

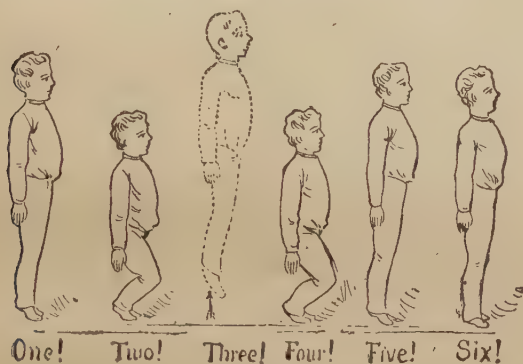


FIG. 34.

suddenly thrown straight upward from the floor, with back straight, chest forward, and head well back; on *four*, the toes and balls of feet touch the floor, the knees bend to their former position, and the body must be well balanced without stooping forward or backward, being careful to have the *raised* heels together, feet in 90 degrees toward each other, and knees well out over the toes; on *five*, the knees are stretched; and on *six*, heels—sink. (Fig. 34.)

2. With turning to left (or right)—in place—jump is done in the same manner, but when in the air the body is turned so as to face to the left (or right) in 90 degrees or 180 degrees from the former position.

3. From place—forward—jump, as In place—jump; but, on *three*, the body is thrown forward, as well as up, so as to land about two or three feet in front of former position. The balance must be kept.

4. From place—backward—jump, the same; but, on *three*, the body is thrown backward, instead of forward,

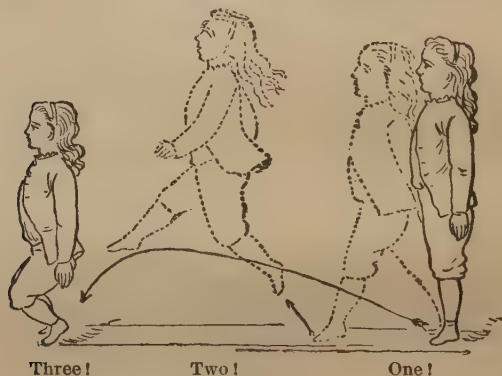


FIG. 35.

so as to land about two feet behind the former place. It is very difficult to keep the balance.

5. With one step—forward—jump is done in five counts. On *one*, the left (or right) foot is placed forward; on *two*, the backward leg swings quickly forward, at the same time the front foot pushes away from the floor, and both feet are brought together before they, on *three*, touch the floor, and land as in other jumping; on *four*,

knees—stretch ; on *five*, heels—sink. This is also done by taking two or three steps forward. (Fig. 35.)

6. Feet—sideways place—with a jump, the same as In place—jump ; but, on *three*, the feet are separated so that they, on *four*, will land in Stride position. (See Fig. 53.) From the Stride position the feet are brought together with another jump. This alternate changing of Stride and Fundamental position with Jump is always interesting to pupils, and produces a deal of elasticity.

What does Rest mean ?

1. Rest means : Take it at ease and rest yourself as you please.

2. In place—rest means : Stand at ease as you like, but keep *one* foot in the place. This is the most frequent.

Is it desirable to use In place—rest often ?

Yes. In place—rest should be used frequently, or as often as it is found that the pupils are getting tired from the exercise or strained position.

Why should that be done ?

Because it is impossible for a child to maintain one position or exercise for any great length of time. When given a moment's rest, and then commanded *Attention!* they will be able to resume their fundamental positions again, and derive the most benefit from the exercises.

Ought the Command always to be in the same tone and rhythm ?

No. It will be found of great value to change the loudness of the command and also the rhythm of the exercises.

Why ?

1. Because it will make the pupils more attentive, thereby increasing the discipline.

2. It will give more variety to the exercise, thereby increasing the interest for them.

IV. INSTRUCTION.

How shall the Instruction be ?

Clear to the point, but short and illustrated.

How are faults corrected ?

Quickly and easily. If possible, by touching the pupil and helping him into the correct position, or by looking at him and making sign by straightening up as he ought to be. If necessary to make a lengthy correction, command *In place—rest!* and then show *how* the pupils *did*, and *how* it *should* be done.

Can the Command be read out of a book or paper ?

No. For inexperienced teachers it may be well to glance at a paper between two exercises ; but, the more the teacher knows by heart, the better will the instruction be.

Is it desirable that the gymnastic lesson shall be slow and quiet ?

No. The instruction must be quick and interesting, and the exercises be performed with life, effort, and precision.

How is that done ?

By changing the rhythm of the exercises, and by letting the pupils, *once in a while*, stamp their feet in

Leg movements, and count loud with some Arm movements, Facings, etc.

Is this good for other purposes?

Yes. It teaches the pupils the Time, and to keep together.

If the teacher is unable to show the exercises, can some of the pupils assist herein?

Yes. One of the best pupils may be called forward to perform the exercises before the class, after the teacher's command. But the pupils should not be permitted to command.

Is it well for the teacher to stay on the platform during the lesson?

To show the exercises the teacher ought to stay on the platform; but otherwise he should move about in the class-room to closely observe each one of the pupils.

How is the teacher best assisted?

By showing *kindness* and *patience*.

How often shall an exercise be repeated?

From one to ten times; or, never so often as to produce fatigue.

Is it not a sign of effectual exercise when the muscles feel fatigued?

No. It is a sign of *overtaxing* the muscles; it brings them into a state of disease, whereby the good effect of the exercises is lost.

How shall the pupils feel after the lesson?

Refreshed both in mind and body, and have a feeling of vigor and health.

How shall we breathe during the exercises ?

Quiet and easy. Never hold the breath during any kind of exercises.

Is it not good to take long and deep inhalations ?

Yes. As a Respiratory movement in rhythm with some kind of Arm exercise ; but the exhalation should follow *at once* after the inhalation has been done.

These exercises *always* end a day's lesson, and are put in after any heavy exercise to quiet the respiration, and they may also begin the lesson.

V. DAY'S ORDER AND PROGRESSION.

Is there any special value in them ?

Yes. It is in the Progression and Order of movements that the Swedish system of gymnastics has its greatest strength.

Are not other systems arranged in this manner ?

They are arranged in some kind of progression, with exercises to develop certain muscles ; but this is not what we aim at with Educational gymnastics.

What is our aim ?

We want a system which will produce a harmonious development,—a perfect equilibrium of all the parts of the body ; have a healthy and strengthening effect on the nervous system, with rest and relief to the worried and overtaxed brain.

Will not any series of exercises do this ?

No. It is not enough to have a series of exercises, even if each of them can be proved to be physiologically right.

What else, then, is necessary ?

The exercises must follow in a certain order after each other, and be progressive from day to day ; from the very gentlest and simplest, step by step, to stronger and more complicated ones ; and the experience must have proved that they will produce the desired effect.

Has this been proved of the Swedish system ?

Yes. The experience of three-fourths of a century has proved the good effect of this system.

How are the Gymnastic Days' Orders arranged ?

In eleven to fourteen groups of movements, in the following order :—

1. Order. 2. Leg. 3. Arch. 4. Arm. 5. Balance.
6. Back. 7. Front. 8. Side. 9. Jumping. 10. Slow leg. 11. Respiratory.

Must this order always be followed ?

Yes. *Always.*

Can we not skip any of the groups or change them about ?

No. They must always follow in the order named, from No. 1 to No. 11.

Why ?

Because in this manner a Day's Order will make a *whole*,—a harmonious, all-sided exercise ; but if changed it will only make something *half*, and the results will be thereafter.

Do we give more than one exercise in each group ?

Not for beginners. But, after awhile, two or three exercises may be given in some of the groups.

Do we never give more than eleven groups ?

Yes. For advanced pupils there may be put in a Fall-out movement after No. 5 ; Running and marching after No. 6 ; and one Leg and one Arm movement after No. 8.

What is the reason for grouping the movements in the above-described manner ?

For some time previous to the gymnastic lesson the pupils have been sitting still, working on their studies ; their minds have been active ; all their powers have been concentrated on mental work. In the most cases the chest has been more or less contracted, the head and shoulders stooping forward, and the chest flattened ; a pressure has occurred upon the abdominal organs, and to some extent checked the venous circulation. Hereby the circulation of the blood has become sluggish ; the blood has been drawn to the brain, and a slight congestion of the brain and abdominal organs has set in ; the respiration is lessened ; the mind is tired and worried ; the muscles are relaxed ; and the bad and ugly habit of the Stooping position is commenced.

The first object, therefore, is to counteract these evils ; to relieve the brain and to straighten the compressed parts ; to equalize and quicken the circulation of the blood ; to produce a healthy respiration, and to strengthen and tone up the muscles and the body generally,—not forgetting the educational and moral part of the gymnastic lesson.

1. The Order movements, which serve to bring the pupils in order and ready to begin their real exercises and to assume the right fundamental position, will also

draw their minds away from their long-continued mental work, and thereby at once bring some relief to the brain.

2. The Leg movements will bring more relief, both to the brain and other oppressed organs, by drawing the blood downward to the lower extremities, and thereby equalize and stimulate the circulation of the blood.

3. The Arch movements tend to expand and raise the chest, and also to straighten the upper part of the back and neck.

4. The Arm movements will elevate and broaden the chest and straighten the whole spine.

Hereby the lungs are given full play, and deeper and more energetic respiration is produced.

Thus, by these four movements, more and better oxygenated blood is carried to the muscles, the congested parts are drained out, and a healthier condition of the muscles will follow. The mind is relieved, the will is concentrated upon the muscular effort, and the body is in condition to perform the succeeding movements.

5. After the Arm movements the heart will often begin to beat more rapid, and therefore Balance movements succeed them, as having a very good counteracting effect. These movements also produce a more all-sided muscular contraction, with equilibrium of the different parts of the body, resulting in a better and more graceful posture; and they have a stimulating effect on the nervous system.

6. The Back movements are to bring the shoulders and shoulder-blades in correct position and to strengthen the muscles of the back, thereby keeping the back straight.

7. The Front movements elevate and stimulate the abdominal organs and strengthen the abdominal walls.

8. The Side movements strengthen the muscles around the waist, and also affect the internal organs and stimulate the spinal nerves.

9. The Jumping movements have an *all-sided* effect upon the whole system, quickening the respiration and circulation and stimulating and strengthening the nerves and muscles. These should be followed by

10. The Slow-leg movements, to bring down the rapid action of the heart and quickened respiration, and to prepare the body for rest, which also will be effected by

11. The Respiratory movements, which always should end the lesson.

All these movements should follow each other in the order mentioned, and be performed with gradually increasing force, compelling stronger and stronger action from the circulatory and respiratory organs up to the Jumping movements, when the culmination of the Day's Order is reached and the force and strength of the exercise is gradually toned down. But we should never reach the point where breathlessness and uncomfortable heart-action begin to appear. Always maintain a deep, free, undisturbed respiration during the exercises. If the action of the heart or lungs seems to be rather strong, there should be administered some movements to counteract this, such as Slow-leg and Respiratory movements, and also be commanded In place—rest! or Rest! Gymnastics never need to have ill effect, if only taught judiciously. But it depends on the teacher if the lesson shall be attractive and effectual to the pupils.

CHAPTER III.

TABLES OF EXERCISES.

As the rules of the School Boards, both in Boston and many other cities, require that Physical Training shall be taught from ten to fifteen minutes daily in each class-room, it is necessary to have some tables of Days' Orders to guide the teachers in their work.

The following tables are arranged for lessons of ten to fifteen minutes' duration, and the full command is given for each exercise.

It will be seen that each Day's Order is intended for daily use for from one to three weeks. As a rule, the pupils should be able to perform one Day's Order before advancing to another; but, even if the same programme is used for a length of time, there can be progression from day to day by adding more force to the exercises and by repeating them oftener.

In the first lesson of a new Day's Order, each exercise should be repeated only once or twice; but as the pupils become accustomed to perform them they may be repeated six or eight times.

I. TABLES FOR SECOND AND THIRD CLASS OF THE PRIMARY SCHOOLS.

In the countries of Europe where gymnastic lessons in schools are obligatory, the child does not receive these lessons before he is eight or nine years old.

I believe that some exercises to teach the child

discipline and to stand straight, as well as to use his arms and legs, will be very useful, but I do not believe that a full Day's Order for children under eight years is necessary; therefore I have arranged the tables for the Primary Schools accordingly.

The following five Days' Orders are to be used as here arranged :—

First Day's Order,	daily for 3 wks.
Second Day's Order,	daily for 3 "
First and Second Days' Orders, . . .	alternately for 3 "
Third Day's Order,	daily for 3 "
First, Second, and Third Days' Orders, . . .	alternately for 3 "
Fourth Day's Order,	daily for 3 "
Third and Fourth Days' Orders, . . .	alternately for 3 "
Fifth Day's Order,	daily for 3 "
Fourth and Fifth Days' Orders, . . .	alternately for 3 "
First to Fifth Day's Order,	alternately for 6 "
<hr/>	
Five Days' Orders,	33 wks.

FIRST DAY'S ORDER.

1. **Order.** Attention! (Fig. 1.) In place—rest! Attention!

2. **Leg.** Feet—close! Feet—open! Close! Open! (Fig. 2.)

3. **Arm.** Hips—firm! (Fig. 8.) Position! In place—rest! Attention!

4. **Head.** Head—backward—bend! (Fig. 23.) Upward—raise!

5. **Respiratory.** Arms—sideways—raise! (Fig. 13.) (Inhale.) Downward—sink! (Exhale.)

SECOND DAY'S ORDER.

1. **Order.** Attention! Forward—dress! (Fig. 16.) Position!

2. **Leg.** Feet—sideways—place! One! Two! (Fig. 3.) Together—place! One! Two!

3. **Head.** Head—backward—bend! Upward—raise!

4. **Arm.** Arms—upward—bend! (Fig. 10.) Downward—stretch! In place—rest! Attention!

5. **Balance.** Hips—firm! Heels—raise! (Fig. 18.) Sink! Position!

6. **Respiratory.** Arms—forward—raise! (Inhale.) (Fig. 14.) Downward—sink! (Exhale.)

THIRD DAY'S ORDER.

1. **Order.** Attention! In place—rest! Attention! Forward—dress! Position!

2. **Leg.** Feet—close! Open! Left foot—forward—place! (Fig. 4.) Replace! Right foot—forward—place! Replace!

3. **Head.** Hips—firm! Head—backward—bend! Head—upward—raise! Position!

4. **Arm.** Arms—forward—bend! (Fig. 11.) Position! In place—rest! Attention!

5. **Balance.** Hips—firm! Feet—sideways—place! One! Two! Feet—together—place! One! Two! Position!

6. **Respiratory.** Arms—sideways and upward—raise! (Inhale.) When the arms are horizontal they

are rotated backward so as to bring the palms up, and the raising of the arms is continued. (Fig. 36.) Arms—sideways and downward—sink! (Exhale.)

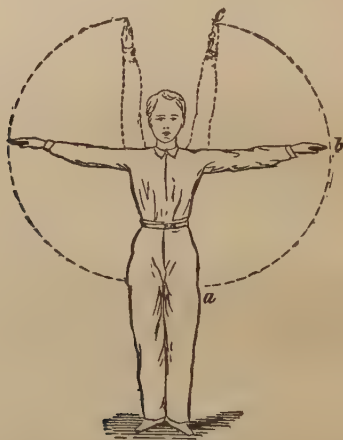


FIG. 36.

FOURTH DAY'S ORDER.

1. **Order.** Attention! One step—forward—march! One! Two! (The left foot is placed forward at One! and at Two! the right foot is placed in to the left; heels together; feet in 90 degrees toward each other.) One step—backward—march! One! Two!

2. **Leg.** Left foot—outward—place! (Fig. 5.) Replace! Right foot—outward—place! Replace!

3. **Head.** Hips—firm! Head—backward—bend! Upward—raise! Position!

4. **Arm.** Arms sideways—stretch! One! Two! (Fig. 29.) Downward—stretch! One! Two! In place—rest! Attention!

5. **Balance.** Hips—firm! Feet—close! Heels—raise! Heels—sink! Position! (Feet open and hands down.)

6. **Trunk.** Hips—firm! Trunk—forward—bend! (Fig. 25.) Trunk—upward—raise! Position!

7. **Respiratory.** Arms—forward and upward—raise! (Inhale.) Forward and downward—sink! (Exhale.) (Fig. 37.)



FIG. 37.

FIFTH DAY'S ORDER.

1. **Order.** Attention! Two steps—forward—march! Left! Right! Left! Two steps—backward—march! Left! Right! Left! Forward—dress! Position!

2. **Leg.** Feet—close! Open! Alternate—toes—raise! One! Two! (Start with left foot.) Halt!

3. **Head.** Hips—firm! Head—backward—bend! Upward—raise! Position!

4. **Arm.** Arms—upward—stretch! One! Two! (Fig. 29.) Downward—stretch! One! Two! In place—rest! Attention!



FIG. 38.

5. **Balance.** Hips—firm! Knees—bend! (Figs. 21 and 38. Heels down.) Knees—stretch! Position!

6. **Trunk.** Hips—firm! Trunk—forward—bend!
Upward—raise! Position!

7. **Respiratory.** Arms—forward—bend! Sideways
—fling! (Inhale.) Bend! (Exhale.) (Fig. 20.)
Fling! (Inhale.) Sideways—sink! (Exhale.)

II. TABLES FOR THE FIRST CLASS OF THE PRIMARY SCHOOLS.

Here are six Days' Orders, to be used as follows:—

First Day's Order,	daily for 3 wks.
Second Day's Order,	daily for 3 "
Third Day's Order,	daily for 3 "
First, Second, and Third Days' Orders, alternately for 3	"
Fourth Day's Order,	daily for 3 "
Third and Fourth Days' Orders,	alternately for 3 "
Fifth Day's Order,	daily for 3 "
Fourth and Fifth Days' Orders,	alternately for 3 "
Sixth Day's Order,	daily for 3 "
Fifth and Sixth Days' Orders,	alternately for 3 "
First to Sixth Day's Order,	alternately for 3 "
Six Days' Orders,	33 wks.

If the pupils have had no previous training the tables for Second and Third class should be given first, but in shorter time.

FIRST DAY'S ORDER.

1. Order. Attention! Forward—dress! (Fig. 16.)
Position! In place—rest! Attention!

2. Leg. Feet—close! Open! (Fig. 2.) Feet side-
ways—place! One! Two! (Fig. 3.) Together—place!
One! Two!

3. Head. Head—backward—bend! (Fig. 23.) Up-
ward—raise!

4. Arm. Arms—upward—bend! (Fig. 10.) Down-
ward—stretch! Arms—forward—bend! (Fig. 11.)
Position! In place—rest! Attention!

5. **Balance.** Hips—firm! Heels—raise! Knees—bend! (Figs. 21 and 38.) Knees—stretch! Heels—sink! Position!

6. **Back.** Hips—firm! Trunk—forward—bend! (Fig. 25.) Upward—raise! Position!

7. **Respiratory.** Arms—sideways and upward—raise! (Inhale.) Sideways and downward—sink! (Exhale.) (See Third Day's Order for second class.) (Fig. 36.)

SECOND DAY'S ORDER.

1. **Order.** Attention! Left—face! Right—face!

2. **Leg.** Left foot—forward—place! (Fig. 4.) Replace! Left foot—outward—place! (Fig. 5.) Replace! Right foot—forward—place! Replace! Right foot—outward—place! Replace!

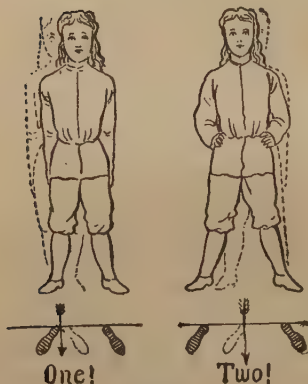


FIG. 39.

3. **Head.** Head—to left—twist! (Fig. 32.) Forward—twist! To right—twist! Forward—twist!

4. **Arm.** Arms—sideways—stretch! One! Two! (Fig. 29.) Downward—stretch! One! Two!

5. **Balance.** Feet—sideways—place, *and* Hips—firm! One! Two! (The hands are placed on the hips at Two!) (Fig. 39.) Position! (Left foot is first replaced, then right foot and hands taken down.) Feet—sideways—place, *and* Hips—firm! One! Two! Heels—raise! Sink! Raise! Sink! Position!

6. **Front.** Hips—firm! Trunk—backward—bend!
(Fig. 24.) Upward—raise! Position!

7. **Respiratory.** Arms—forward and upward—raise!
(Inhale.) Sideways and downward—sink! (Exhale.)
(Figs. 36 and 37.)

THIRD DAY'S ORDER.

1. **Order.** Attention! About—face! About—face!
(Fig. 17.) Forward—dress! Position!

2. **Leg.** Feet—close! Open! Left foot—backward—place! Replace! Right foot—backward—place! Replace! (The foot is placed two feet's length straight backward, instead of forward.)

3. **Head.** Hips—firm! Head—to left—twist! Forward—twist! To right—twist! Forward—twist! Head—backward—bend! Upward—raise!

4. **Arm.** Arms—forward—stretch! One! Two!
(Fig. 29.) Downward—stretch! One! Two!

5. **Balance.** Hips—firm, *and* Left foot—outward—place! Heels—raise! Sink! Position! Hips—firm, *and* Right foot—outward—place! Heels—raise! Sink! Position! (The body must not be swayed forward, but rest evenly on both legs.)

6. **Back.** Neck—firm! (Fig. 9.) Position!

7. **Front.** Feet—sideways—place, *and* Hips—firm! One! Two! Trunk—backward—bend! Upward—raise! Position! One! Two!

8. **Respiratory.** Arms—forward—bend! Sideways—fling! (Inhale.) Bend! (Exhale.) Fling! (Inhale.) Sink! (Exhale.) (Fig. 20.)

FOURTH DAY'S ORDER.

1. **Order.** Attention! Two steps—forward—march! Left! Right! Left! Two steps—backward—march! Left! Right! Left! Forward—dress! Position!

2. **Leg.** Left foot—backward and outward—place! Replace! Right foot—backward and outward—place! Replace! (The foot is placed oblique backward, in the direction of the other heel; two feet's distance between the heels; feet maintaining 90 degrees toward each other.



FIG. 40.

3. **Arch.** Hips—firm! Trunk—forward—bend! Upward—raise! Head—backward—bend! Upward—raise! Position!

4. **Arm.** Arms—upward and sideways—stretch! One! Two! One! Two! (Fig. 29.)

5. **Balance.** Left foot—forward—place, *and* Hips—firm! Heels—raise! Sink! Replace! Right foot—forward—place, *and* Hips—firm! Heels—raise! Sink! Replace! (Heels must be raised straight up without swaying body forward.) (Fig. 40.)

6. **Back.** Neck—firm! Hips—firm! Neck—firm! Position!

7. **Front.** Feet—sideways—place, *and* Hips—firm! One! Two! Trunk—backward—bend! Upward—raise! Position! One! Two!

8. **Respiratory.** Arms—sideways—raise! Arm—circling! Downward—sink!

FIFTH DAY'S ORDER.

1. **Order.** Attention! Half—left—face! Half—right—face!

2. **Leg.** Left foot—forward—place! Feet—change! One! Two! Three! Four!

3. **Arch.** Feet—sideways—place, *and* Hips—firm! —One! Two! Trunk—forward—bend! Upward raise! Head—to left—twist! Forward—twist! To right—twist! Forward—twist! Position!

4. **Arm.** Arms—sideways—stretch! One! Two! Arm—rotation! One! Two! Downward—stretch! One! Two!

5. **Balance.** Neck—firm! Heels—raise! Sink! Position!

6. **Trunk.** Hips—firm! Trunk—backward—bend! Upward—raise! Forward—bend! Upward—raise! Position! (Figs. 24 and 25.)

7. **Jump.** Hips—firm! Prepare to—jump! (Heels—raise! Knees—bend! Stretch! Sink!) (Figs. 21 and 38.) Position!

8. **Respiratory.** Arms—forward and upward—raise! (Inhale.) Sideways and downward—sink! (Exhale.)

SIXTH DAY'S ORDER.

1. **Order.** Attention! Left—face! About—face! Right—face! About—face! Forward—dress! Position!

2. **Leg.** Hips—firm! Alternate—heels and toes—raise! One! Two! Three! Four! Position!

3. **Arch.** Hips—firm! Trunk—backward—bend! Upward—raise! Forward—bend! Upward—raise! Head—backward—bend! Upward—raise! Position!

4. **Arm.** Arms—half-forward—bend! (Fig. 12.) Position!

5. **Balance.** Arms—sideways—raise, *and* Feet—close! Heels—raise! Sink! Position!

6. **Side.** Feet—close! Trunk—to left—bend! Upward—raise! To right—bend! Upward—raise! (Fig. 26.) Position!

7. **Jump.** Prepare to—jump! One! Two! Three! Four!

8. **Respiratory.** Arms—forward—raise! Arms—sideways—fling! (Inhale.) Arms—forward—move! (Exhale.) Sideways—fling! (Inhale.) Downward—sink! (Exhale.)

III. TABLES FOR FIFTH AND SIXTH CLASS OF THE GRAMMAR SCHOOLS.

Seven Days' Orders, as follows:—

First Day's Order,	daily for 2 wks.
Second Day's Order,	daily for 2 "
First and Second Days' Orders,	alternately for 2 "
Third Day's Order,	daily for 2 "
Second and Third Days' Orders,	alternately for 2 "
Fourth Day's Order,	daily for 2 "
Third and Fourth Days' Orders,	alternately for 2 "
Fifth Day's Order,	daily for 3 "
Fourth and Fifth Days' Orders,	alternately for 3 "
Sixth Day's Order,	daily for 3 "
Fifth and Sixth Days' Orders,	alternately for 3 "
Seventh Day's Order,	daily for 3 "
Sixth and Seventh Days' Orders,	alternately for 3 "
Seven Days' Orders,	32 wks.

If the pupils have had no previous training the tables for the Primary School should be given first, but in shorter time.

FIRST DAY'S ORDER.

1. **Order.** Attention! Left—face! Right—face!
Forward—dress! (Fig. 16.) Position!

2. **Leg.** Feet—close! Open! (Fig. 2.) Alternate—
toes—raise! One! Two! One! Two! Halt!

3. **Arch.** Hips—firm! Head—backward—bend!
(Fig. 23.) Head—upward—raise! Position!

4. **Arm.** Arms—upward—stretch! One! Two!
(Fig. 29.) Downward—stretch! One! Two!

5. **Balance.** Hips—firm! Heels—raise! Knees—bend! Stretch! Bend! Stretch! Heels—sink! Position!
(Figs. 21 and 38.)

6. **Back.** Arms—sideways—raise! (Fig. 36.) Arm—rotation! One! Two! Arms—sink!

7. **Front.** Hips—firm! Trunk—backward—bend!
(Fig. 24.) Upward—raise! Position!

8. **Side.** Feet—close! Trunk—to left—bend! (Fig. 26.) Upward—raise! To right—bend! Upward—raise! Position!

9. **Jump.** Mark time—Mark! One! Two! Halt!
(The leg is raised forward with straight knee and well-pointed toes; the body steady, chest forward; start with left foot.)

10. **Slow Leg.** Feet—sideways—place! One! Two! (Fig. 3.) Together—place! One! Two!

11. **Respiratory.** Arms—sideways and upward—raise! (Inhale.) Sideways and downward—sink! (Exhale.) (Fig. 36.)

SECOND DAY'S ORDER.

1. **Order.** Attention! About—face! About—face!
(Fig. 17.)

2. **Leg.** Left foot—forward—place! Replace!
(Fig. 4.) Left foot—outward—place! Replace! (Fig. 5.) Right foot—the same!

3. **Arch.** Hips—firm! Head—to left—twist! Forward—twist! To right—twist! Forward twist! (Fig.

32.) Head—backward—bend! Upward—raise! Position!

4. **Arm.** Arms—forward and sideways—stretch! One! Two! One! Two! (Fig. 29.)

5. **Balance.** Hips—firm! Left knee—upward—bend! (Fig. 22.) Downward—stretch! Right knee—upward—bend! Downward—stretch! Position!

6. **Back.** Left arm—sideways, *and* Right arm—upward—stretch! One! Two! (Fig. 41.) Change! One! Two! Downward—stretch! One! Two!

7. **Front.** Feet—sideways—place, *and* Hips—firm! One! Two! (Fig. 39.) Trunk—backward—bend! Upward—raise! Position! One! Two!

8. **Side.** Feet—sideways—place, *and* Hips—firm! One! Two! Trunk—to left—twist! (Fig. 33.) Forward—twist! To right—twist! Forward—twist! Position! One! Two!

9. **Jump.** In place—march! One! Two! Halt! One! Two! (The knee is bent and the foot raised slightly backward, like in Quick time.) (Fig. 42.)

10. **Slow Leg.** Left foot—outward—place, *and* Hips—firm! Heels—raise! Sink! Change—feet! One! Two! Heels—raise! Sink! Position! (Raise the heels straight up, without swaying forward.)

11. **Respiratory.** Arms—forward—bend! Sideways—fling! (Inhale.) Bend! (Exhale.) Fling! (Inhale.) Downward—sink! (Exhale.) (Fig. 20.)

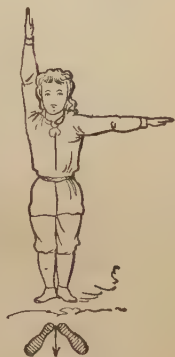


FIG. 41.

THIRD DAY'S ORDER.

1. **Order.** Attention! Half—left—face! Half—right—face!

2. **Leg.** Alternate—heels and toes—raise! One! Two! Three! Four!

3. **Arch.** Head—to left—bend! Upward—raise! To right—bend! Upward—raise! Head—backward—bend! Upward—raise!

4. **Arm.** Arms—forward—bend! Sideways—fling! Repeat in Quick time. One! Two! Position!

5. **Balance.** Neck—firm! Heels—raise! Knees—bend! Stretch! Bend! Stretch! Sink! Position!

6. **Back.** Feet—sideways—place, *and* Hips—firm! One! Two! Trunk—forward—bend! Upward—raise! Position! One! Two! (Fig. 25.)

7. **Front.** Left foot—forward—place, *and* Hips—firm! Trunk—backward—bend! Upward—raise! Position! (See Fig. 51, but hands on hips.) Change—feet! (Weight of body evenly on both legs.)



FIG. 42.

8. **Side.** Neck—firm! Trunk—to left—bend! Upward—raise! To right—bend! Upward—raise! Position! (Fig. 45, but heels together.)

9. **Jump.** Quick time—in place—march! One! Two! Halt! One! Two! Three! Four! (Fig. 42.)

10. **Slow Leg.** Feet—sideways—place, *and* Neck—firm! One! Two! Heels—raise! Sink! Position! One! Two!

11. **Respiratory.** Arms—sideways—raise! Arms—circling! Halt! Hands—turn! Arms—

upward—raise! Sideways—sink! Upward—raise!
Sideways—downward—sink!

FOURTH DAY'S ORDER.

1. **Order.** Attention! Left—face! One step—to left—march! Right—face! One step—forward—march!

2. **Leg.** Left foot—forward, outward, and backward—place! One! Two! Replace! Three! Four! Five! Six! Right foot—the same!

3. **Arch.** Hips—firm! Head—to left—twist! Head—backward—bend! Head—upward—raise! Forward—twist! To right—twist! Head—backward—bend! Upward—raise! Forward—twist! (When head is twisted to left it is bent backward toward the right shoulder.)

4. **Arm.** Arms—forward and backward—stretch! One! Two! One! Two! Downward—stretch! One! Two!

5. **Balance.** Left foot—forward—place, *and* Hips—firm! Heels—raise! Knees—bend! Stretch! Sink! Feet—change! One! Two! Heels—raise! Knees—bend! Stretch! Sink! Position! (The weight of the body evenly on both legs.)

6. **Back.** Arms—half-forward—bend! Arm—rotation! (Fig. 12.) One! Two! One! Two! Position!

7. **Front.** Neck—firm! Trunk—backward—bend! Upward—raise! Position!

8. **Side.** Feet—close, *and* Hips—firm! Trunk—to left—twist! Forward, *and* to right—twist! Forward—twist! Position! (Fig. 33.)

9. **Jump.** Prepare to—jump! One! Two! Three! Four! (In Quick time—Heels—raise! Knees—bend! Stretch! Sink!) (Figs 21 and 38.)

10. **Slow Leg.** Mark time—mark! (Compare First Day's Order.)

11. **Respiratory.** Arms—forward—raise! Sideways—fling! (Inhale.) Downward—sink! (Exhale.)

FIFTH DAY'S ORDER.

1. **Order.** Attention! Left—face! One step—to left—march! About—face! One step—to left—march! Left—face! Forward—dress! Position!

2. **Leg.** Arms—forward and upward, *and* Heels—raise! Sideways and downward—sink!

3. **Arch.** Hips—firm! Trunk—backward—bend! Upward—raise! Position!

4. **Arm.** Left arm—upward, *and* Right arm—downward—stretch! Change! One! Two! (Fig. 43.) Both arms—sideways—stretch!

One! Two! Position!

5. **Balance.** Hips—firm! Feet—sideways—place! Heels—raise! Knees—bend!

Stretch! Sink! (Fig. 44, but hands on hips.) (The knees must be kept well out.) Position!

6. **Back.** Arms—sideways—raise! Trunk—forward—bend! Upward—raise! Position!



FIG. 43.



FIG. 44.

7. Front. Left foot—forward—place, *and* Neck—firm! (Fig. 45*a*.) Trunk—backward—bend! (See Fig. 51, but hands on neck.) Upward raise! Change—feet! The same! Position!

8. Side. Feet—sideways—place, *and* Neck—firm! Trunk—to left—bend! Raise! To right—bend! Raise! (Fig. 45.) Position!



FIG. 45*a*.



FIG. 45.



FIG. 46.

9. Jump. In place—jump! One! Two! Three! Four! Five! Six! (Fig. 34.)

10. Slow Leg. Hips—firm! Left leg—backward—raise! (Fig. 46.) Downward—sink! Right leg—backward—raise! Sink! Position!

11. Respiratory. Arms—sideways and upward, *and* Heels—raise! (Inhale.) Sink! (Exhale.)

SIXTH DAY'S ORDER.

1. **Order.** Attention! Half—left—face! Right—face! Left—face! Half—left—face!

2. **Leg.** Feet—sideways—place, *and* Arms—upward—stretch! One! Two! (Fig. 47.) Heels—raise! Knees—bend! Stretch! Sink! Position! One! Two!

3. **Arch.** Hips—firm! Trunk—backward—bend! Raise! Trunk—forward—bend! Raise!

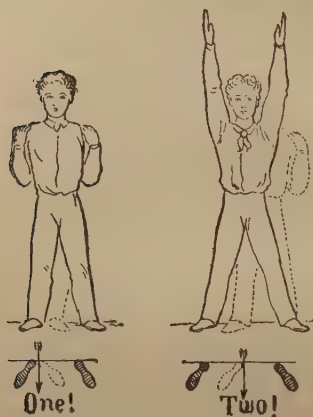


FIG. 47.



FIG. 48.

4. **Arm.** Arms—forward, upward, sideways, backward, and downward—stretch! (Fig. 29.)

5. **Balance.** Hips—firm! Left knee—upward—bend! Forward—stretch! Bend! Downward—stretch! Right knee—the same! (Fig. 27.)

6. **Back.** Hips—firm! Trunk—forward—bend! Head—rotation! Left—forward—right—forward—twist! (Fig. 48.)

7. **Front.** Arms—forward—bend! Trunk backward—bend! Arms—sideways—fling! Bend! Fling! Trunk—upward—raise! Arms—sink!

8. **Side.** Feet—sideways—place, *and* Arms—upward—stretch! One! Two! Trunk—to left—twist! Forward, *and* to right—twist! Forward—twist! (Fig. 49.) Position!

9. **Jump.** Hips—firm! Left foot—forward—place! Change—quick! (With a hop or dancing step.)

10 and 11. **Slow Leg and Respiratory.** Arms—forward—bend! Heels—raise, *and* Arms—sideways—fling! (Inhale.) Heels—sink, *and* Arms—bend! (Exhale.) Position!



FIG. 49.

SEVENTH DAY'S ORDER.

1. **Order.** Attention! Two steps—forward—march! About—face! Left—face! Two steps—to right—march! Left—face!



FIG. 50.

2. **Leg.** Heels—raise, Knees—bend, *and* Arms sideways and upward—raise! (Fig. 50.) Knees—stretch, *and* Heels and arms—sink!

3. **Arch.** Neck—firm! Trunk—backward—bend! Upward—raise! Position! Head—to left—bend! To right—bend! Upward—raise!

4. **Arm.** Left arm—forward, *and* Right arm—backward—stretch! One! Two! Change! One! Two! Downward—stretch! One! Two!

5. **Balance.** Hips—firm! Left knee—upward—bend! Backward—stretch! Upward—bend! (Fig. 28.) Downward—stretch! Right knee—the same! Position!

6. **Back.** Feet—sideways—place, *and* Neck—firm! One! Two! Trunk—forward—bend! Raise! Position! One! Two!

7. **Front.** Arms—upward—stretch, *and* Left foot—forward—place! One! Two! Trunk—backward—bend! Upward—raise! (Fig. 51.) Change—feet! The same! Position! One! Two!

8. **Side.** Right arm—upward—stretch, *and* Feet—close! One! Two! Trunk—to left—bend! (Fig. 52.) Trunk—upward—raise! Arms—change! One! Two! Trunk—to right—bend! Raise! Position! One! Two!

9. **Jump.** Hips—firm! Feet—sideways and together—place—with a jump! One! Two! (Fig. 53.) Position!

10. **Slow Leg.** Hips—firm! Half—right—face! Left foot—outward—place! Heels—raise! Knees—bend! (Fig. 54.) Knees—stretch! Heels—sink! Left foot—replace! Left—face! Right foot—outward—place! Heels—raise! Knees—bend! Stretch! Sink! Foot—replace! Half—right—face! Position! (The weight of the body on the backward knee, when knees are bent.)

11. **Respiratory.** Arms—forward and upward, *and* Heels—raise! (Inhale.) Sideways—downward—sink! (Exhale.)



FIG. 51L



FIG. 53.



FIG. 52.



FIG. 54.

IV. TABLES FOR THIRD AND FOURTH CLASS OF THE GRAMMAR SCHOOLS.

Nine Days' Orders, as follows :—

First Day's Order,	. . . . .	daily for 2 wks.
Second Day's Order,	. . . . .	daily for 2 "
Third Day's Order,	. . . . .	daily for 2 "
Fourth Day's Order,	. . . . .	daily for 2 "
Third and Fourth Days' Orders,	. . . . .	alternately for 2 "
Fifth Day's Order,	. . . . .	daily for 2 "
Fourth and Fifth Days' Orders,	. . . . .	alternately for 2 "
Sixth Day's Order,	. . . . .	daily for 2 "
Fifth and Sixth Days' Orders,	. . . . .	alternately for 2 "
Seventh Day's Order,	. . . . .	daily for 2 "
Sixth and Seventh Days' Orders,	. . . . .	alternately for 2 "
Eighth Day's Order,	. . . . .	daily for 2 "
Seventh and Eighth Days' Orders,	. . . . .	alternately for 2 "
Ninth Day's Order,	. . . . .	daily for 3 "
Eighth and Ninth Days' Orders,	. . . . .	alternately for 3 "
Nine Days' Orders,	. . . . .	32 wks.

If pupils have no previous training, the tables for Fifth and Sixth class should be given first, but in shorter time.

FIRST DAY'S ORDER.

1. **Order.** Attention! (Fig. 1.) Left—face! Right—face! About—face! (Figs. 16 and 17.) Forward—dress! Position!

2. **Leg.** Alternate—toes—raise! (In Quick time.) Halt! Feet—close! Open! (Fig. 2.)

3. **Arch.** Head—backward—bend! (Fig. 23.) Upward—raise! Hips—firm! Trunk—forward—bend! (Fig. 25.) Upward—raise! Position!

4. **Arm.** Arms—sideways, *and* upward and downward—stretch! One! Two! One! Two! One! Two! (Fig. 29.)

5. **Balance.** Hips—firm! Heels—raise! Knees—bend! Stretch! Bend! Stretch! Sink! Position! (Figs. 21 and 38.)

6. **Back.** Neck—firm! Position! Left hip, *and* Right neck—firm! Change! Position!

7. **Front.** Hips—firm! Trunk—backward—bend! (Fig. 24.) Upward—raise! Position!

8. **Side.** Hips—firm! Trunk—to left—bend! Upward—raise! To right—bend! Upward—raise! (Fig. 26.) Position!

9. **Jump.** Prepare to—jump! One! Two! Three! Four! (In Quick time—Heels—raise! Knees—bend! Stretch! Sink!)

10. **Slow Leg.** Left leg—forward—raise! Downward—sink! (Fig. 19.) Right leg—forward—raise! Downward—sink!

11. **Respiratory.** Arms—sideways and upward—raise! (Inhale.) (Fig. 36.) Sideways and downward—sink! (Exhale.)

SECOND DAY'S ORDER.

1. **Order.** Attention! One step—backward—march! About—face! About—face! One step—forward—march!

2. **Leg.** Arms—forward and upward, *and* Heels—raise! (Fig. 37.) Sideways and downward—sink!

3. **Arch.** Head—to left—twist! (Fig. 32.) Forward, *and* To right—twist! Forward—twist! Head—backward—bend! Upward—raise!

4. **Arm.** Arms—forward—bend, *and* Heels—raise! Knees—bend! Arms—sideways—fling! Bend! Fling! Knees—stretch! Position!

5. **Balance.** Neck—firm! Left leg—backward—raise! (Fig. 46.) Downward—sink! Right leg—backward—raise! Downward—sink! Position!

6. **Back.** Arms—sideways—raise! Trunk—forward—bend! Upward—raise! Position!

7. **Front.** Hips—firm, *and* Left foot—forward—place! Trunk—backward—bend! Upward—raise! Feet—change! The same! (See Fig. 51, but keep hands on hips, instead of upward.)

8. **Side.** Feet—sideways—place, *and* Arms—sideways—stretch! One! Two! Trunk—to left—twist! Forward, *and* To right—twist! Forward—twist! Position! One! Two! (Figs. 33 and 49.)

9. **Jump.** In place—jump! One! Two! Three! Four! Five! Six! (Fig. 34.)

10. **Slow Leg.** Mark time—mark! One! Two! Halt! One! Two! (Compare First Day's Order, Table III.)

11. **Respiratory.** Arms—forward and upward—raise! (Inhale.) (Fig. 37.) Sideways and downward—sink! (Exhale.)

THIRD DAY'S ORDER.

1. **Order.** Attention! Half—left—face! About—face! Left—face! Half—left—face!

2. **Leg.** Left foot—forward—place! (Fig. 40.) Heels—raise! Sink! Foot—replace! Left foot—outward—place! Heels—raise! Sink! Foot—replace! Right foot—the same!

3. **Arch.** Arms—sideways—raise! Head—to left—bend! Head—raise! To right—bend! Raise! Arms—sink! Head—backward—bend! Raise!

4. **Arm.** Heels—raise! Knees—bend! Knees—deep—bend! (As far down as possible, without sitting on the heels; heels together; knees well out.) (Fig. 55.) Arms—upward and downward—stretch! Knees—stretch! Heels—sink!

5. **Balance.** Hips—firm! Left knee—upward—bend! (Fig. 27.) Forward—stretch! Bend! Knees—change! Right leg—forward—stretch! Bend! Position!

6. **Back.** Feet—sideways—place, *and* Neck—firm! One! Two! (Hands are placed on neck at Two!) Trunk—forward—bend! Upward—raise! Position! One! Two!

7. **Front.** Arms—forward—bend! Trunk—backward—bend! Arms—sideways—fling! Trunk—upward—raise! Arms—sink!

8. **Side.** Left hip, *and* Right neck—firm! Feet—close! Trunk—to left—bend! Upward—raise!



FIG. 55.

Hands—change! Trunk—to right—bend! Upward—raise! Position!

9. **Jump.** Hips—firm! Feet—sideways, *and* together—place—with a jump! One! Two! (Fig. 53.)

10. **Slow Leg.** Left foot—forward—place! Heels—raise! Knees—bend! Stretch! Sink! Feet—change! One! Two! The same! (Even on both legs.)

11. **Respiratory.** Arms—sideways—raise! Arm—circling! Halt! Arms—upward—raise! Downward—sink!

FOURTH DAY'S ORDER.

1. **Order.** Attention! Two steps—forward—march! One! Two! Three! Two steps—backward—march! One! Two! Three!

2. **Leg.** Hips—firm! Left foot—backward—place! Replace! Backward—outward—place! Replace! Right foot—the same! Feet—close! Open!

3. **Arch.** Hips—firm! Head—circling! Halt! (Fig. 30.) Head—backward—bend! Upward—raise!

4. **Arm.** Arms—forward, upward, sideways, backward, *and* downward—stretch! (Fig. 29.)

5. **Balance.** Neck—firm! Heels—raise! Knees—bend! Stretch! Bend! Stretch! Sink! Position!

6. **Back.** Left foot—forward—place, *and* Arms—sideways—raise! Trunk—forward—bend! Upward—raise! Feet—change! One! Two! The same! Position!

7. **Front.** Feet—sideways—place, *and* Neck—firm!

Trunk—backward—bend! Upward—raise! Position!
One! Two!

8. **Side.** Arms—upward—stretch, *and* Feet—side-ways—place! One! Two! (Fig. 47.) Trunk—to left—twist! (Fig. 49.) Forward, *and* To right—twist! Forward—twist! Position!

9. **Jump.** Hips—firm! Left knee—upward—bend! Change—quick! (Resembles running, with the knees lifted forward.) (Fig. 56.) Halt! One! Two! Three! Four! Position!

10. **Slow Leg.** Hips—firm! Half—right—face! Left foot—outward—place! Heels—raise! Knees—bend! (Fig. 54.) Stretch! Sink! Left foot—replace! Left—face! Right foot—outward—place! The same! (The weight of the body on the backward knee, when knees are bent.)

11. **Respiratory.** Arms—forward—raise! Heels—raise, *and* Arms—sideways—fling! (Inhale.) Heels—sink, *and* Arms—forward—move! (Exhale.)



FIG. 56.

FIFTH DAY'S ORDER.

1. **Order.** Attention! One step forward, *and* About—face! (Left foot is placed forward, then the whole body is turned 180 degrees to the right side on the balls of both feet, and finally the left foot is placed in to the right.) One! Two! Three!

2. **Leg.** Hips—firm! Left foot—forward—place! Heels—raise! Knees—bend! Stretch! Sink! Change—feet! The same! Position!

3. Arch. Hips—firm! Trunk—forward—bend! Head—rotation! (Left and right.) Forward—twist! Trunk—upward—raise! Position! (Fig. 48.)

4. Arm. Left foot—forward—place! Arms—upward and downward—stretch! (Fig. 57.) (In Quick time.) Feet—change! The same! Position!

5. Balance. Hips—firm! Left knee—upward—bend! (Fig. 22.) Left knee—sideways—move! (The left leg is brought out to the left side as far as possible,



FIG. 57.



FIG. 58.

still maintaining the right angle in hip- and knee-joints.) Knee—forward—move! Change knees! The same! Position!

6. Back. Left foot—forward—place, *and* Neck—firm! Trunk—forward—bend! Upward—raise! Feet—change! Trunk—forward—bend! Raise! Position!

7. Front. Arms—upward—stretch! Trunk—backward—bend! (Fig. 58.) Trunk—upward—raise!

Trunk—forward and downward—bend! (Fig. 59.)
Upward—raise! Position!

8. **Side.** Feet—sideways—place, *and* Neck—firm!
Trunk—to left—bend! Upward—raise! To right—
bend! Raise! (Fig. 45.) Position!

9. **Jump.** Left foot—forward—place! Change—
quick! (With a hop or dancing step.)

10. **Slow Leg.** Arms
and left leg—sideways—
raise! Arms and legs—
change!



FIG. 59.



FIG. 60.

11. **Respiratory.** Arms—forward—bend! Heels—
raise, *and* Arms—sideways—fling! (Inhale.) Heels—
sink, *and* Arms—bend! (Exhale.)

SIXTH DAY'S ORDER.

1. **Order.** Attention! Three steps—forward, *and*
About—face—march! One! Two! Three! Four! Five!

2. **Leg.** Hips—firm! Left—forward—fall out!
(Figs. 6 and 60.) Feet—change! One! Two! Position!

3. **Arch.** Neck—firm! Trunk—backward—bend! Upward—raise! Position!

4. **Arm.** Heels—raise! Knees—deep—bend! Arms—forward, sideways, and upward—stretch! Knees—stretch! Position!

5. **Balance.** Hips—firm! Left knee—upward—bend! Knee—forward—stretch! Bend! Backward—stretch! (Figs. 27 and 28.) Bend! Knees—change!



FIG. 61.

6. **Back.** Arms—forward—bend! Trunk—forward—bend! Arms—sideways—fling! Bend! (Fig. 61.) Fling! Trunk—upward—raise! Position!

7. **Front.** Arms—upward—stretch, *and* Left foot—forward—place! Trunk—backward—bend! (Fig. 51.) Upward—raise! Feet—change! The same!

8. **Side.** Feet—sideways—place, *and* Arms—sideways—stretch! Trunk—to left—twist! To right—twist! (In Quick time.) Forward—twist!

9. **Jump.** From place—forward—jump! One! Two! Three! Four! Five! Six! (See “Jumps.”)

10. **Slow Leg.** Hips—firm! Left leg—backward—raise! Right heel—raise! Sink! Feet—change! Left heel—raise! Sink! Position!

11. **Respiratory.** Heels—raise, Knees—bend, *and* Arms—sideways and upward—raise! (Fig. 50.) (Inhale.) Knees—stretch, *and* Arms and heels—sink! (Exhale.)

SEVENTH DAY'S ORDER.

1. **Order.** Attention! Left—face! One step—to left—march! Right—face, *and* One step—forward—march!

2. **Leg.** Half—right—face! Hips—firm! Left—outward—fall out! (Fig. 37.) Position! Left—face! Hips—firm! Right—outward—fall out! Position! Half—right—face!

3. **Arch.** Left foot—forward—place, *and* Neck—firm! Trunk—backward—bend! Upward—raise! Feet—change! The same! Position!

4. **Arm.** Left arm—forward and upward—fling! Arms—change! Both arms—sideways, upward, and downward—stretch!

5. **Balance.** Hips—firm! Left leg—forward—raise! Left leg—rotation! One! Two! Legs—change! Right leg—rotation! One! Two! Position!

6. **Back.** Feet—sideways—place! Trunk—forward—bend! Arms—forward and upward—fling! Trunk—upward—raise! Position!

7. **Front.** Feet—sideways—place, *and* Hips—firm! Trunk—forward—bend! Trunk—circling! (To the left—backward—right—forward; then to right—backward—left—forward.) (Fig. 31.) Trunk—upward—raise! Position!

8. **Side.** Left foot—forward—place, *and* Right arm—upward—stretch! One! Two! Trunk—to left—bend! Upward—raise! Arms, *and* Feet—change! One! Two! Trunk—to right—bend! Upward—raise! Position!

•

9. **Jump.** Turning 90 degrees—to left—in place—jump! The same to right! One! Two! Three! Four! Five! Six! (See “Jumps.”)



FIG. 62.

10. **Slow Leg.** Hips—firm! Left toe—backward—place! Right knee—bend! Stretch! Feet—change! Left knee—bend! Stretch! Position! (Keep the trunk well up and backward leg straight, chest forward.) (Fig. 62.)

11. **Respiratory.** Arms—forward and upward—fling, *and* Heels—raise! (Inhale.) Sideways and downward—sink!

EIGHTH DAY'S ORDER.

1. **Order.** Attention! Three steps—forward, About—face, *and* Two steps—forward—march! One! Two! Three! Four! Five! Six! Seven! (Left—right—left—*turn*—left—right—left.) (When the turning has been done on the balls of both feet, the left foot is placed forward *at once*, without stopping.)

2. **Leg.** Hips—firm! Left—backward—fall out! (The left foot is placed three feet's length straight backward, and the right knee is bent, as in Right—forward—fall out.) (Fig. 60.) Feet—change! One! Two!

3. **Arch.** Arms—upward—stretch! One! Two! Trunk—backward—bend! Upward raise! (Figs. 58 and 59.) Forward—bend! Upward—raise! Position!

4. **Arm.** Heels—raise, *and* Arms—upward—bend! Arms—upward—stretch, *and* Knees—bend! Arms—bend, *and* Knees—stretch! (In Quick time.) Arms—stretch! Knees—bend! Arms—bend! Knees—stretch! Position!

5. **Balance.** Hips—firm! Half—right—face! Left—outward—fall out! Left heel—raise! Sink! Position! Left—face! Right—outward—fall out! Right heel



FIG. 63.



FIG. 64.

—raise! Sink! (Fig. 63.) Position! Half—right—face!

6. **Back.** Arms—forward and upward—fling, *and* Left foot—forward—place! Trunk—forward—bend! Upward—raise! Arms and feet—change! One! Two! The same!

7. **Front.** Hips—firm! Kneel—down! Trunk—backward—bend! Raise! Bend! Raise! (Fig. 64.) Position!

8. **Side.** Arms—forward—bend, *and* Feet—close! Trunk—to left—twist, *and* Arms—sideways—fling!

(Fig. 65.) Forward—twist, *and* Arms—bend! To right—twist, *and* Arms—fling! Forward—twist! Position!



FIG. 65.

9. **Jump.** One step—forward—jump! One! Two! Three! Four! Five! (Fig. 35.)

10. **Slow Leg.** Left leg—forward, *and* Arms—sideways—raise! Right heel—raise! Sink! Legs—change! Left heel—raise! Sink! Position!

11. **Respiratory.** Arms—upward—bend! Trunk—forward—bend! Arms—sideways—stretch! (Slowly, inhale.) Arms—bend! (Exhale.) Trunk—upward—raise! Position!

NINTH DAY'S ORDER.

1. **Order.** Attention! Right—face—two steps—to right—Left face—two steps—forward—march! One! Two! Three! Four! Five! Six! Seven! Eight! Nine!

2. **Leg.** Half—left—face! Hips—firm! Left—backward—outward—fall out! (The left leg is placed three feet's length oblique backward, in the direction of the right heel. The right knee is bent, as in Right—outward—fall out.) (Fig. 37.) Position! Right—face! Hips—firm! Right—backward—outward—fall out! Position! Half—left—face!

3. **Arch.** First, third, and fifth lines—Arms—upward—stretch, *and* Feet—sideways—place! Trunk—backward—bend! Second, fourth, and sixth lines—support! (They place one foot forward and raise their arms so as to grasp the hands of the one in front and support him from falling backward.) (Fig. 66.) The first lines—Heels—raise! Heels—sink! Trunk—upward—raise! Position! About—face! The same!



FIG. 66.

4. **Arm.** Left—forward—fall out! Arms—forward, upward, and downward—stretch! Feet—change! One! Two! The same!

5. **Balance.** Feet—close, *and* Arms—sideways—raise! Left foot—forward—place! Heels—raise! Sink! Feet—change! The same! Position!

6. **Back.** Arms—half-forward—bend! (Fig. 12.) Arm—rotation! One! Two! One! (Now the fore-arms shall be perpendicular, pointing straight upward.) Trunk—forward—bend! Upward—raise! Arms—sideways—stretch! Arms—upward—raise! Sideways—downward—sink!

7. **Front.** Hips—firm! Left—forward—fall out! Right knee—on floor—support! Trunk—backward—bend! Trunk—raise! Right knee—stretch! Feet—change! One! Two! Left knee—on floor—support! The same! Position! (See Fig. 72, but hips firm.)

8. **Side.** Arms—upward—stretch! Trunk—to left—bend! Upward—raise! To right—bend! Upward—raise! (Fig. 68.) Position!



FIG. 68.

9. **Jump.** Hips—firm! Left foot—forward—place! Change—quick! Halt! Position!

10. **Slow Leg.** Half—left—face! Right foot—outward—place, *and* Neck—firm! Heels—raise! Knees—bend! Stretch! Sink! Position! Right—face! Left foot—outward—place, *and* Neck—firm! Heels—raise! Knees—bend! Stretch! Sink! (Fig. 54.) Position! Half—left—face!

11. **Respiratory.** Arms—forward—bend, *and* Left foot—backward—place! Trunk—slightly backward—bend! Arms—sideways—fling! (Inhale.) Arms—bend! (Exhale.) Trunk—raise! Feet—change! The same! Position!

V. TABLES FOR FIRST AND SECOND CLASS OF THE GRAMMAR SCHOOLS.

Fifteen Days' Orders, as follows :—

First Day's Order,	daily for 1 wk.
Second Day's Order,	daily for 1 "
First and Second Days' Orders, . . .	alternately for 1 "
Third Day's Order,	daily for 1 "
Second and Third Days' Orders, . . .	alternately for 1 "
Fourth Day's Order,	daily for 1 "
Third and Fourth Days' Orders, . . .	alternately for 1 "
Fifth Day's Order,	daily for 1 "
Fourth and Fifth Days' Orders, . . .	alternately for 1 "
Sixth Day's Order,	daily for 1 "
Fifth and Sixth Days' Orders, . . .	alternately for 1 "
Seventh Day's Order,	daily for 1 "
Sixth and Seventh Days' Orders, . . .	alternately for 1 "
Eighth Day's Order,	daily for 1 "
Seventh and Eighth Days' Orders, . . .	alternately for 1 "
Ninth Day's Order,	daily for 1 "
Eighth and Ninth Days' Orders, . . .	alternately for 1 "

And so on.

If the pupils have had no previous training, the tables for Fifth and Sixth and Third and Fourth classes of the grammar schools should be given first, but in shorter time.

FIRST DAY'S ORDER.

1. **Order.** For Order movements the teacher may give different facings, marching, dressing, etc., as described in the foregoing tables.

2. **Leg.** Hips—firm! Feet—close! Open! (Fig. 2.) Alternate—heels, *and* Toes—raise! Position!

3. **Arch.** Head—to left—twist! Forward—twist! To right—twist! (Fig. 32.) Forward—twist! Head—backward—bend! (Fig. 23.) Upward—raise!

4. **Arm.** Arms—sideways, upward, and downward—stretch! (Fig. 29.) One! Two!

5. **Balance.** Hips—firm! Heels—raise! Knees—bend! (Figs. 21 and 38.) Stretch! Bend! Stretch! Sink! Position!

6. **Back.** Hips—firm! Trunk—forward—bend! (Fig. 25.) Upward—raise! Neck—firm! Position!

7. **Front.** Hips—firm! Trunk—backward—bend! (Fig. 24.) Upward—raise! Position!

8. **Side.** Trunk—to left—bend! Upward—raise! To right—bend! (Fig. 26.) Upward—raise!

9. **Jump.** Hips—firm! Prepare to—jump! One! Two! Three! Four! Position! (Heels—raise! Knees—bend! Stretch! Sink!)

10. **Slow Leg.** Arms—forward and upward, *and* Heels—raise! (Figs. 18 and 37.) Forward and downward—sink!

11. **Respiratory.** Arms—sideways—raise! Hands—turn! (Palms up.) Arms—upward—raise! (Inhale.) (Fig. 36.) Arms—sideways—sink! (Exhale.)

SECOND DAY'S ORDER.

1. **Order.**

2. **Leg.** Left foot—forward—place, *and* Arms—upward—bend! Heels—raise, *and* Arms—upward—stretch! (Figs. 40 and 57.) Heels—sink, *and* Arms—bend! Feet and arms—change! Position!

3. **Arch.** Hips—firm! Trunk—backward—bend! Upward—raise! (Figs. 24 and 25.) Forward—bend! Upward—raise!

4. **Arm.** Arms—forward—bend! Sideways—fling! (Fig. 20.) Bend! Fling! (In Quick time.) Position!

5. **Balance.** Hips—firm! Left knee—upward—bend! Forward—stretch! (Fig. 27.) Bend! Knee—change! The same!

6. **Back.** Arms—half-forward—bend! (Fig. 12.) Arms—rotation! One! Two! Position!

7. **Front.** Hips—firm, *and* Left foot—forward—place! Trunk—backward—bend! (Fig. 51, but hands on hips.) Upward—raise! Feet—change! The same!

8. **Side.** Feet—sideways—place, *and* Hips—firm! (Fig. 39.) Trunk—to left—twist! Forward—twist! (Fig. 33.) To right—twist! Forward—twist! Position!

9. **Jump.** Quick time—in place—march! One! Two! (Fig. 42.) Halt! One! Two! Three! Four!

10. **Slow Leg.** Mark time—mark! (Compare First Day's Order, Table III.)

11. **Respiratory.** Arms—forward—bend! Sideways—fling! (Inhale.) Bend! (Exhale.)

THIRD DAY'S ORDER.

1. **Order.**

2. **Leg.** Half—right—face! Hips—firm! Left—outward—fall out! Left heel—raise! Sink! (Fig. 63.) Position! Left—face! Hips—firm! Right—outward—fall out! Right heel—raise! Sink! Position!

3. **Arch.** Head—to left—bend! Upward—raise! To right—bend! Raise! Head—backward—bend! Upward—raise!

4. **Arm.** Arms—forward, backward, and downward—stretch! (Fig. 29.) (In Quick time.)

5. **Balance.** Arms—upward—stretch! Heels—raise! (Fig. 55.) Knees—deep—bend! Stretch! Position!

6. **Back.** Hips—firm! Trunk—forward—bend! (Fig. 48.) Head—rotation! Trunk—raise! Position!

7. **Front.** Feet—sideways—place, *and* Arms—forward—bend! Trunk—backward—bend! Arms—sideways—fling! Bend! Fling! Trunk—upward—raise! Position!

8. **Side.** Feet—sideways—place, *and* Neck—firm! (Fig. 45.) Trunk—to left—bend! Upward—raise! To right—bend! Raise! Position!

9. **Jump.** In place—jump! One! Two! Three! Four! Five! Six! (Fig. 34.)

10. **Slow Leg.** Hips—firm, *and* Heels—raise! In place—march! Halt! One! Two! Position!

11. **Respiratory.** Arms—forward and upward, *and* Heels—raise! (Fig. 37.) (Inhale.) Arms—sideways, downward, *and* Heels—sink!

FOURTH DAY'S ORDER.

1. **Order.**

2. **Leg.** Arms—upward—bend, *and* Heels—raise! Arms—upward—stretch, *and* Knees—bend! Arms—bend, *and* Knees—stretch! Arms—stretch, *and* Knees—bend! Position!

3. **Arch.** Hips—firm! Head—to left—twist! Head—backward—bend! Upward—raise! To right—twist! Backward—bend! (When head is bent backward in this position it is bent toward the opposite shoulder.) Upward—raise! Forward—twist! Trunk—forward—bend! Upward—raise!

4. **Arm.** Left arm—sideways, *and* Right arm—upward—stretch! (Fig. 41.) Change! One! Two! Both arms—upward and downward—stretch!

5. **Balance.** Hips—firm! Left leg—forward—raise! Left foot—upward—bend, *and* Downward—stretch! One! Two! Change—legs! The same! (See “Bend,” page 26.)

6. **Back.** Feet—sideways—place, *and* Neck—firm! Trunk—forward—bend! Upward—raise! Position!

7. **Front.** Left foot—forward—place, *and* Neck—firm! Trunk—backward—bend! Upward—raise! Feet—change! The same! Position!

8. **Side.** Feet—sideways—place, *and* Hips—firm! Trunk—forward—bend! Trunk—circling! (Fig. 31.) (To left—backward—right—forward, *and* reverse.) Trunk—upward—raise! Position!

9. **Jump.** Hips—firm! Feet—sideways—place! with (Fig. 53) a jump! *and* together! One! Two!

10. **Slow Leg.** Hips—firm! Left leg—backward—raise! (Fig. 46.) Legs—change! One! Two! Position!

11. **Respiratory.** Arms—sideways—raise! Arms—circling! (Upward, backward, downward, forward.) Hands—turn! Arms—raise! Sink!

FIFTH DAY'S ORDER.

1. **Order.**

2. **Leg.** Hips—firm! Left—forward—fall out! (Figs. 6 and 60.) Left heel—raise! (Fig. 63.) Sink! Legs—change! One! Two! The same! Position!

3. **Arch.** Feet—sideways—place, *and* Hips—firm! Head—to left—twist! Forward, *and* To right—twist!

Forward—twist! Trunk—backward—bend! Upward—raise! Forward—bend! Upward—raise! Position!

4. **Arm.** Heels—raise! Knees—deep—bend! Arms—sideways, upward, and downward—stretch! Knees—stretch! Heels—sink!

5. **Balance.** Hips—firm, *and* Heels—raise! Left foot—forward—place! Feet—change! One! Two! (The weight of the body even on both legs; heels must not come down.) Position!

6. **Back.** Arms—sideways—raise, *and* Left foot—forward—place! Trunk—forward—bend! Upward—raise! Feet—change! The same! Position!

7. **Front.** First, third, and fifth lines—Arms—upward—stretch! Trunk—backward—bend! Second, fourth, and sixth lines—support! (See Ninth Day's Order, Table IV, Fig. 66, but heels down.) The first lines—Trunk—upward—raise! Position! About—face! The same!

8. **Side.** Right arm—upward—stretch, *and* Feet—close! One! Two! Trunk—to left—bend! (Fig. 52.) Upward—raise! Arms—change! One! Two! Trunk—to right—bend! Raise! Position!

9. **Jump.** Hips—firm! Left knee—upward—bend! (Fig. 56.) Knees—change—quick! Halt! Position!

10. **Slow Leg.** Hips—firm, *and* Left foot—forward—place! Heels—raise! Knees—bend! Stretch! Sink! Feet—change! The same!

11. **Respiratory.** Arms—forward—raise! Arms—sideways—fling, *and* Heels—raise! (Inhale.) Arms—forward—move, *and* Heels—sink! (Exhale.) Position!

SIXTH DAY'S ORDER.

1. **Order.**

2. **Leg.** Feet—sideways—place, *and* Arms—upward—stretch! Heels—raise! Knees—bend! (Fig. 44.) Knees—stretch! Sink! Position!

3. **Arch.** Hips—firm! Head—circling! (Left and right.) (Fig. 30.) Left foot—forward—place! Trunk—forward—bend! Raise! Feet—change! The same! Position!

4. **Arm.** Arms—forward, upward, sideways, backward, and downward—stretch! (Fig. 29.)

5. **Balance.** Hips—firm! Left knee—upward—bend! (Fig. 28.) Backward—stretch! Bend! Knees—change! One! Two! The same!

6. **Back.** Arms—forward—bend! Trunk—forward—bend! Arms—sideways—fling! Bend! (Fig. 61.) Fling! Trunk—upward—raise! Arms—sink!

7. **Front.** Feet—sideways—place, *and* Hips—firm! Trunk—forward—bend! Trunk—circling! (Compare Group 8, Fourth Day's Order.) Trunk—upward—raise! Position!

8. **Side.** Feet—sideways—place, *and* Arms—upward—stretch! (Fig. 47.) Trunk—to left—twist! (Fig. 49.) Forward, *and* To right—twist! Forward—twist! Position!

9. **Jump.** From place—forward—jump! One! Two! Three! Four! Five! Six! (See "Jumps.")

10. **Slow Leg.** Hips—firm! Left leg—forward—raise! Legs—change! (Fig. 19.) One! Two! Position!

11. **Respiratory.** Arms—sideways and upward, *and* Heels—raise! (Figs. 18 and 36.) (Inhale.) Arms *and* Heels—sink!

SEVENTH DAY'S ORDER.

1. **Order.**

2. **Leg.** Neck—firm! Left—forward—fall out! Heels—raise! Heels—sink! Legs—change! The same! (Both heels are raised without changing the position of the legs, trunk, or head.)

3. **Arch.** Arms—sideways—raise! Trunk—backward—bend! Upward—raise! Forward—bend! Upward—raise! Position!

4. **Arm.** Left foot—forward—place! Left arm—sideways—upward—fling! Arms—change! Both arms—forward, upward, and downward—stretch! Feet—change! The same!

5. **Balance.** Hips—firm! Left leg—forward—raise! Left foot—circling! Left leg—rotation! Legs—change! Right foot—circling! Right leg—rotation! Position!

6. **Back.** Feet—sideways—place, *and* Arms—sideways—raise! Trunk—forward—bend! Arm—rotation! One! Two! One! Trunk—upward—raise! Arms—upward—raise! Position! One! Two!

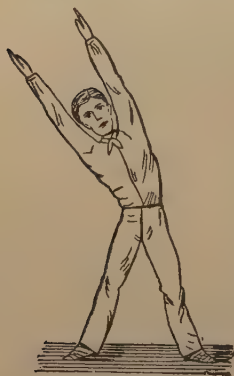


FIG. 68b.

7. **Front.** Hips—firm! Left—forward—fall out! Trunk—backward—bend! Trunk—raise! (Straighten forward.) Legs—change! The same! (The trunk is bent backward, maintaining the front knee in a right angle and the backward leg straight.)

8. **Side.** Arms—upward—stretch, *and* Feet—sideways—place! Trunk—to left—bend! (Fig. 68b.) Upward—raise! To right—bend! Raise! Position!

9. **Jump.** Left foot—forward—place! Change—quick! (With a hop or dancing-step.)

10. **Slow Leg.** Hips—firm, *and* Left leg—backward—raise! Right heel—raise! Sink! Legs—change! Left heel—raise! Sink! Position!

11. **Respiratory.** Arms—sideways, *and* Heels—raise! Knees—bend, *and* Arms—upward—raise! (Fig. 50.) (Inhale.) Knees—stretch, *and* Arms—sideways—sink! (Exhale.)

EIGHTH DAY'S ORDER.

1. **Order.**

2. **Leg.** Heels—raise! Knees—bend, *and* Arms—sideways and upward—raise! (Fig. 50.) Knees—stretch, *and* Arms—sink!

3. **Arch.** Feet—sideways—place, *and* Arms—forward—bend! Trunk—backward—bend! Arms—sideways—fling! Trunk—raise! Position!

4. **Arm.** Left—forward—fall out! Arms—forward, sideways, upward, backward, and downward—stretch! Legs—change! The same!

5. **Balance.** Left foot—forward—place, *and* Arms—sideways—raise! Heels—raise! Knees—bend! Stretch! Sink! Feet—change! The same! Position!

6. **Back.** Trunk—forward—bend! Neck—firm! Hips—firm! Neck—firm! Trunk—upward—raise! Position!

7. **Front.** Hips—firm! Kneel—down! Trunk—backward—bend! (Fig. 64.) Trunk—raise! Backward—bend! Raise! Position!

8. **Side.** Arms—forward—bend, *and* Feet—close! Trunk—to left—twist, *and* Arms—sideways—fling! (Fig. 61.) Trunk—forward—twist, *and* Arms—bend!

To right—twist, *and* Arms—fling! Forward—twist, *and* Arms—bend! Position!

9. **Jump.** From place—backward—jump! One! Two! Three! Four! Five! Six! (See “Jumps.”)

10. **Slow Leg.** Hips—firm! Left toe—backward—place! (Fig. 62.) Right knee—bend! Stretch! Feet—change! Left knee—bend! Stretch! Position!

11. **Respiratory.** Arms—upward—bend! Trunk—backward—bend! Arms—sideways—stretch! (Inhale.) Arms—bend! (Exhale.) Stretch! (Inhale.) Trunk—raise, *and* Arms—sink! (Exhale.)

NINTH DAY'S ORDER.

1. Order.

2. **Leg.** Hips—firm! Left foot—forward—place! Heels—raise! Knees—bend! Stretch! Sink! Feet—change! The same! Position!

3. **Arch.** Arms—sideways—raise! Head—backward—bend! Upward—raise! Trunk—backward—bend! Upward—raise! Position!

4. **Arm.** Heels—raise! Knees—deep—bend! Arms—forward, upward, sideways, backward, *and* downward—stretch! Knees—stretch! Heels—sink!



FIG. 69.

5. **Balance.** Half—right—face! Left arm—upward, *and* Right arm—backward—stretch, *and* Left—outward—fall out! (Fig. 69.) One! Two! Left heel—raise! Sink! Position! Left—face! Right arm—upward, *and* Left arm—backward—stretch, *and* Right—outward—fall out! The same! Half—right—face!

6. **Back.** Left—backward—fall out, *and* Arms—forward and upward—fling! One! Legs *and* Arms—change! One! Two! (The leg is placed three feet's length straight backward and the front knee bent, as in Forward—fall out; the arms are raised at the same time. When changed, the Fundamental position is taken at One! and the Fall out and Arms upward at Two.)

7. **Front.** Feet—sideways—place, *and* Arms—upward—stretch! (Fig. 47.) Trunk—backward—bend! (Fig. 58.) Arms—bend! Stretch! Trunk—raise! (Fig. 59.) Forward and downward—bend! Upward—raise! Position!

8. **Side.** Arms—sideways—raise! Trunk—to left—twist! To left—bend! Upward—raise! To right—twist! To right—bend! Upward—raise! Forward—twist! Position!

9. **Jump.** With turning 90 degrees to the left—in place—jump! One! Two! Three! Four! Five! Six! The same, to the right! (See "Jumps.")

10. **Slow Leg.** Arms—sideways, *and* Left leg—forward—raise! (Fig. 19.) Right heel—raise! Sink! Legs—change! The same!

11. **Respiratory.** Trunk—to left—twist! Arms—forward—bend! Arms—sideways—fling! (Inhale.) Arms—bend! (Exhale.) Trunk—to right—twist! Arms—fling! Bend! Forward—twist! Position!

TENTH DAY'S ORDER.

1. **Order.**

2. **Leg.** Heels—raise, *and* Neck—firm! Knees—deep—bend! Stretch! Bend! Stretch! Heels—sink! Position!

3. **Arch.** Left foot—forward—place, *and* Neck—firm! Trunk—backward—bend! Upward—raise! Forward—bend! Raise! Feet—change! The same! Position!

4. **Arm.** Left—forward—fall out, *and* Arms—forward—bend! Arms—sideways—fling! Bend! Fling! Arms—upward—raise! Sink, *and* Legs—change, *and* Arms—forward—bend! The same!

5. **Balance.** Arms—sideways—raise! Left knee—upward—bend! Forward—stretch! Bend! Backward—stretch! (Figs. 27 and 28.) Bend! Knees—change! The same!

6. **Back.** Arms—upward—stretch! Trunk—forward and downward—bend! (Fig. 59.) Upward—raise! Position!

7. **Front.** Hips—firm! Left—forward—fall out! Right knee—on floor—support! Trunk—backward—bend! (Fig. 67.) Trunk—raise! Right knee—stretch! Legs—change! Left knee—on floor—support! The same! Position!

8. **Side.** Left hip, *and* Right neck—firm, *and* Left foot—forward—place! Trunk—to left—bend! Upward—raise! Hands, *and* Feet—change! Trunk—to right—bend! Upward—raise! Position!

9. **Jump.** Hips—firm! Hopping twice on each foot—Quick time—march! One! Two! One! Two! (Fig. 42.)

10. **Slow Leg.** Half—left—face! Hips—firm, *and* Right foot—outward—place! Heels—raise! Knees—bend! (Fig. 54.) Stretch! Sink! Position! Right—face! Hips—firm, *and* Left foot—outward—place! The same! Position!

11. **Respiratory.** Arms—sideways—raise, *and* Left foot—backward—place! Hands—turn! Trunk—backward—bend, *and* Arms—upward—raise! (Fig. 51.) (Inhale.) Trunk—raise, *and* Arms—sideways—sink! (Exhale.) Feet—change! The same!

ELEVENTH DAY'S ORDER.

1. **Order.**

2. **Leg.** Arms—forward—bend! Left—backward—fall out, *and* Arms—sideways—fling! Arms—bend, *and* Foot—replace! Arms—fling, *and* Right—backward—fall out! Position!

3. **Arch.** Hips—firm! Trunk—to left—twist! Trunk—backward—bend! Upward—raise! Forward, *and* To right—twist! Backward—bend! Upward—raise! Forward—twist! Position!

4. **Arm.** Arms—half-forward—bend! (Fig. 12.) Arm—rotation! One! Two! One! (Now the fore-arms shall be perpendicular on the upper-arms.) Left arm—sideways—stretch! Right arm—sideways—stretch, *and* Left arm—half—bend! Change! Both arms—upward—stretch! Position!

5. **Balance.** Arms—upward—stretch, *and* Left foot—forward—place! Heels—raise! Knees—bend! Stretch! Sink! Arms—bend, *and* Foot—replace! Arms—stretch, *and* Right foot—forward—place! The same! Position!

6. **Back.** Feet—sideways—place, *and* Arms—upward—stretch! Trunk—forward—bend! Arms—bend! Arms—stretch! Trunk—raise! Position!

7. **Front.** Left foot—forward—place! Trunk—

backward—bend! Arms—sideways and upward—raise!
Sink! Trunk—raise! Feet—change! The same!

8. **Side.** Hips—firm! Left—forward—fall out!
Trunk—to left—twist! Forward—twist! Legs—
change! Trunk—to right—twist! Forward—twist!
Position!

9. **Jump.** One step—forward—jump! One! Two!
(Fig. 35.) Three! Four! Five!

10. **Slow Leg.** Arms—upward—stretch! Heels—
raise! (Fig. 55.) Knees—deep—bend! Stretch! Bend!
Stretch! Heels—sink! Position!

11. **Respiratory.** Arms—forward—bend! Trunk
—to left—twist, *and* Arms—sideways—fling! (In-
hale.) Forward—twist, *and* Arms—bend! (Exhale.)
To right—twist, *and* Arms—fling! Forward—twist,
and Arms—bend! Position!

TWELFTH DAY'S ORDER.

1. Order.

2. **Leg.** Arms—forward and upward, *and* Heels—
raise! Knees—bend, *and* Arms—sideways—sink!
Knees—stretch! Heels—sink, *and* Arms—downward
—sink!

3. **Arch.** First, third, and fifth lines—Arms—up-
ward—stretch, *and* Feet—sideways—place! Trunk—
backward—bend! Second, fourth, and sixth lines—
support! (Fig. 66.) The first lines—Trunk—upward
—raise! Position! About—face! The same!

4. **Arm.** Hands—on desks—place! Legs—backward
—stretch! Legs—forward—stretch! (Fig. 70.) Po-
sition! (The first times the desks will be best, but after

awhile the hands may be placed on the seats ; the chest must be kept well forward, and shoulders back ; head up.)

5. **Balance.** Left —forward—fall out, *and* Arms—forward—bend! Heels—raise, *and* Arms—sideways—fling! Sink, *and* Arms—bend! Legs—change! The same!



FIG. 70.

6. **Back.** Arms—upward—stretch, *and* Left foot—forward—place! Trunk—forward—bend! Arms—sideways—sink! Arms—upward—raise! Trunk—upward—raise! Arms, *and* Feet—change! The same!

7. **Front.** Arms—upward—stretch! Kneel—down! (Fig. 71.) Trunk—backward—bend! Trunk—raise! Bend! Raise! Knees—stretch! Position!



FIG. 71.

8. **Side.** Feet—sideways—place, *and* Neck—firm! Trunk—to left—twist! To left—bend! Upward—raise! Forward, *and* To right—twist! To right—bend! Upward—raise! Forward—twist! Position!

9. **Jump.** With turning 180 degrees to the left—in place—jump! One! Two! Three! Four! Five! Six! The same, to the right!

10. **Slow Leg.** Arms—forward and upward—fling, *and* Left toe—backward—place! (Fig. 62.) Right knee—bend! Stretch! Feet, *and* Arms—change! The same!

11. **Respiratory.** Arms—forward—bend! Trunk—forward—bend! (Fig. 61.) Arms—sideways—fling! (Inhale.) Arms—bend! (Exhale.) Trunk—raise! Position!

THIRTEENTH DAY'S ORDER.

1. Order.

2. **Leg.** Knees—deep—bend, *and* Arms—forward and upward—fling! Knees—stretch, *and* Arms—forward and downward—sink!

3. **Arch.** Head—circling! Halt! Neck—firm! Trunk—forward—bend! Upward—raise! Position!

4. **Arm.** Left—forward—fall out! Arms—forward, backward, sideways, upward, and downward—stretch! Legs—change!

5. **Balance.** Hips—firm, *and* Heels—raise! Knees—bend! Left foot—outward—place! Feet—change! (Fig. 54.) One! Two! Right foot—replace! Knees—stretch! Position! (When the foot is placed outward the weight of the body remains on the backward knee, which is kept in a right angle.)

6. **Back.** Arms—half-forward—bend! Trunk—forward—bend! Arm—rotation! One! Two! One! (Fore-arms now perpendicular.) Arms—slowly—upward—stretch! Trunk—upward—raise! Neck—firm! Position!

7. **Front.** Arms—forward and upward—fling, *and* Left—forward—fall out! Right knee—on floor—sup-

port! Trunk—backward—bend! (Fig. 72.) Trunk—raise! Right knee—stretch! Arms, *and* Legs—change! Left knee—on floor—support! The same!

8. **Side.** Feet—sideways—place, *and* Arms—sideways—raise! Trunk—to left—twist! To right—twist! To left! To right! (In Quick time, without moving the hips and legs, and keeping the shoulders well back.)



FIG. 72.

9. **Jump.** Arms—sideways and upward—fling, *and* Feet—sideways—place, with a jump! (As Fig. 53, but the arms raised quickly, sideways—upward, when Stride, and downward when legs come together.)

10 and 11. **Slow Leg and Respiratory.** Arms—sideways and upward—raise, *and* Knees—bend! (Inhale.) Knees—stretch, *and* Arms—sink! (Exhale.) Arms—sideways—raise! Arms—circling! Position!

FOURTEENTH DAY'S ORDER.

1. **Order.**

2. **Leg.** Half—right—face! Left arm—forward and upward, *and* Right arm—backward—fling, *and* Left—outward—fall out! One! Position! The same! Position! Left—face! Right arm—forward and upward, *and* Left arm—backward—fling, *and* Right—outward—fall out! Position!

3. **Arch.** Arms—upward—stretch, *and* Left foot—forward—place! Trunk—backward—bend! Upward—

raise! Forward—bend! Upward—raise! Feet, *and* Arms—change! The same!

4. **Arm.** Hands—on desks—place! Legs—forward—place! (Hang down

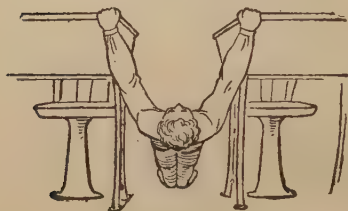


FIG. 73.

in the arms, as Fig. 73.) Arms—bend! (The arms are bent in the elbow-joint, and body thereby lifted up.) Arms—stretch! Position!

5. **Balance.** Half—left—face! Arms—upward—stretch, *and* Right foot—outward—place! (Fig. 54.) Heels—raise! Knees—bend! Stretch! Sink! Position! Right—face! Arms—upward—stretch, *and* Left foot—outward—place! The same!

6. **Back.** Front—lying on desks—place! (As Fig. 74.) Hips—firm! Trunk—backward—bend! Trunk—forward—stretch! Position!



FIG. 74.

7. **Front.** Knees—bend! Hands—on floor—place! (Between the knees.) Legs—backward—stretch! (Straight, as

Fig. 75.) Keep this position a few seconds, then—Legs—bend! Position! Instead of this may be given

the following: Arms—forward—raise! Kneel—down! Trunk—backward—bend, *and* Arms—upward—fling! Trunk—raise, *and* Arms—forward—sink! Position!

8. **Side.** Arms—upward—stretch, *and* Left foot—forward—place! Trunk—to left—twist! To left—bend! Trunk



FIG. 75.

—raise! Forward—twist! Feet—change! Trunk—to right—twist! To right—bend! Trunk—raise! Forward—twist! Position!

9. **Jump.** Hips—firm! Heels—raise! Knees—deep—bend! In place—hop! (Without stretching knees, and keeping the body straight.) Knees—stretch! Position!

10. **Slow Leg.** Sideways—hands—grasp! (The pupils grasp the hands of each other on both sides.) Arms—upward, *and* Right leg—backward—raise! Left knee—bend! (When the knee is bent, the body is bent forward and the raised leg is kept straight backward as Fig. 77, but the hands continue to hold on to the neighbor, thereby steadying each other.) Left knee—stretch! Bend! Stretch! Feet—change! Right knee—bend! Stretch! Bend! Stretch! Position!

11. **Respiratory.** Swimming motion—Arms—forward—bend! Arms—forward—stretch, *and* Sideways—fling! (Inhale.) Arms—forward—bend! (Exhale.) (The arms are brought straight forward, with the palms down, and, without stopping, the arms are brought out sideways; then the fore-arms are bent to the former position.)

FIFTEENTH DAY'S ORDER.

1. **Order.**

2. **Leg.** Half—left—face! Left foot—outward—place, *and* Neck—firm! Heels—raise! Knees—bend! Stretch! Sink! Position! Right—face! The same!

3. **Arch.** First, third, and fifth lines—Arms—upward—stretch, *and* Feet—sideways—place! Trunk—backward—bend! Second, fourth, and sixth lines—support! First lines—Heels—raise! Sink! Raise! Sink! Trunk—upward—raise! Position! About—face! The same! (Fig. 66.)

4. **Arm.** Hands—on desks—place! Legs—backward—raise! (Fig. 76.) Arms—bend! Arms—stretch!



FIG. 76.



FIG. 77.

(The arms must not be bent further than to a right angle in the elbow-joint; chest well forward; shoulders back; head up.) Position!

5. **Balance.** Arms—forward and upward—fling, *and* Left leg—backward—raise! Right knee—bend! Right knee—stretch! Arms, *and* Legs—change! Left knee—bend! Stretch! Position! (Fig. 77.)

6. **Back.** Arms—forward and upward—fling, *and* Left—backward—fall out! Trunk—forward—bend! (Without changing the position of the legs, the trunk is bent at the hips so that the trunk and arms are horizontal, the arms well up, not falling in front of the head.) Trunk—raise! Arms, *and* Legs—change! The same! Position!

7. **Front.** Sitting—on desks—place! Hips—firm! Trunk—backward—bend! Upward—raise! (Fig. 78.) Position!

8. **Side.** Half—right—face! Left arm—forward and upward, *and* Right arm—backward—fling, *and* Left—outward—fall out! Arms—change, *and* Trunk—to left—twist! (The right arm is raised straight forward and upward, and the left arm brought forward, downward, and backward, and the trunk twisted to the left from above to hips; the legs



FIG. 78.

are kept steady, and the trunk not bent backward.) Arms—change, *and* Trunk—forward—twist! Position! Left—face! Right arm—forward and upward, *and* Left arm—backward—fling, *and* Right—outward—fall out! Arms—change, *and* Trunk—to right—twist! Arms—change, *and* Forward—twist! Position!

9. **Jump.** Left foot—forward—place! Change—Quick! Halt! Left knee—upward—bend! Change—Quick! Halt!

10. **Slow Leg.** Knees—deep—bend! Hands—on desks (or seats)—support! Left leg—forward—stretch! (The weight of the body is thrown over on the right leg, and the left heel rests on the floor straight forward, with the left knee straight; the trunk and head erect.) Legs—change! One! Two! Right leg—replace! Knees—stretch! Position!

11. **Respiratory.** Arms—sideways—raise, *and* Left foot—backward—place! Trunk—backward—bend, *and* Arms—upward—raise! (Inhale.) Trunk—raise, *and* Arms—sideways—sink! (Exhale.) Feet—change! The same!

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voice. A thorough-bred person may belong to the artistic, mechanical, or scientific classes, either appreciatively or executively; he must exhibit both gentleness and spirit, as occasion requires; he must be governed by the law of justice; he must make the comfort of his associates his concern, and do what is *right* in order to enhance their happiness.

The facial indications of those who are not thorough-bred, speaking physiologically, are as follow: A coarse, thick skin; a "muddy" complexion, or one permanently blotched, pimpled, or discolored; dull eyes, very small or very large and bulging; coarse hair, or that which is very light or colorless,—that is to say, of no *decided* hue. I regard very light colored, pallid people as morbid varieties; also those with irregular teeth, a very small or ill-shapen nose, small nostrils, perpendicular jaws, exposed gums, open mouth, receding chin, or one that projects greatly forward, ending in a point; thin, pallid, dry lips; hollow cheeks, flat upper cheeks, ugly or ill-shapen ears; a voice weak, thin, hoarse, shrill or nasal; a long, cylindrical neck; a high, narrow forehead.

The undue development of certain organs and systems of the body induces abnormal conditions, as, for example, an excessive disposition of fatty tissue. When the appetite is voracious, or the nutritive system uncommonly active, too much of the carbonaceous elements of the food are eliminated, or, as it often occurs, too much carbonaceous food, such as white bread, potatoes, etc., is consumed for the needs of the body; the consequence is an excess of fat, which, in many subjects, impedes respiration, prevents activity, and gives a generally uncomfortable feeling. For this condition a spare diet is often prescribed, but as this is felt to be a hardship, and as few who attempt it succeed in continuing it long enough to produce satisfactory results, it is pronounced a failure.

For this class of people there is a very agreeable and sure method of reducing the bulk without reducing strength and without compelling too great a sacrifice of the appetite.

HOW TO REDUCE THE SIZE WITHOUT LOSING STRENGTH.

A diet which will attain this result is easily obtained, and of it the subject can use a quantity sufficient to allay the craving for food.

This diet consists of absolutely *raw* foods, nothing cooked being allowed. This diet, of course, must consist mainly of fruits, nuts, grains, milk, and, when flesh-meat is desired, a Hamburg beefsteak may be partaken of; this steak is raw beef chopped fine and seasoned with onion, salt, pepper, or other condiments; to this may be added raw oysters and clams. Every kind of fruit

is a dangerous being); he should develop his friendliness, love of children, and of the opposite sex; in short, he should be a *lover of humanity*.

THE SYSTEMS AND FACULTIES REQUIRED FOR A SURGEON.

The best form for a surgeon who attempts the most severe



FIG. 380.—EDWARD JENNER, M.D. (CELEBRATED ENGLISH PHYSICIAN, AUTHOR, AND DISCOVERER OF VACCINATION.)

No scientific physiognomist could mistake this face for other than that of a physician, and an earnest and attentive one as well, as evidenced by the signs of "natural physician" in the cheek-bones, in the attitude of the head and neck, and by the thoughtful, observant expression of the eye. The combination of systems in this subject is such as is most frequently observed among physicians, viz., the supremacy of the osseous and brain systems. The muscular, thoracic, and vegetative powers all assist in this combination by their development. The signs for Conscience and Firmness are apparent. Love of Home and Patriotism rank high. Benevolence, Amativeness, Love of Young, Mirth, Approbation, Self-esteem, Modesty, Friendship, Alimentiveness, Sanativeness, Pneumativeness, and Color combine to form a lovely domestic and social nature. The form, size, and peculiarities of the nose claim attention. It is a nose denoting Constructiveness, Originality, and logical power. The signs for Hope, Analysis, Mental Imitation, Human Nature, Ideality, Sublimity, Construction, and Acquisition are strongly delineated. Self-will is normally developed, while Size, Form, Observation, Weight, Locality, Calculation, and Memory of various sorts are manifest. The signs of Language in the eye and mouth denote fluency, while the practical faculties, being dominant, would give clearness, perspicacity, and directness to his style of expression, either oral or written. Time, Order, Reason, and Intuition are well developed. The long-continued observation and experiments of this noble physician in his endeavor to protect humanity from the ravages of small-pox by his discovery of vaccination, met at last with a suitable recognition, for he received by a vote of Parliament the sum of £30,000, and special honors were awarded him. It is a singular fact that all of the benefactors of the human race—those who have benefited it by discoveries of any kind whatever—have met with the most violent opposition, treachery, and often disgrace, before they could make the world see the value of their discoveries. Such was the case with Dr. Jenner, but his firmness and truth at last gained the victory.

operations is the round build of body and head, and many of them are of this shape. The muscular system should be supreme, with the brain system a close second, the bony and thoracic systems about equal and next in development.

The muscular tissue is *comparatively unfeeling*—insensitive;

in the body. Form and Size are also requisite to aid the memory of the shape and relative position of each part, and to assist Locality. Human Nature is essential in order that he may be *en rapport* with his patients, and also to enable him to *divine* instinctively all bodily and mental states. He should be a good physiognomist, and be well versed in the *pathology* of physiognomy. He must have large Observation, in order to take cognizance of the most minute changes and appearances. Calculation is a useful trait also, as it is required in many ways in the medication and treatment of the wounded, as in chemistry and in making surgical implements, etc. He should have large Friendship; in order to attach his patients to him and to command their esteem; enough Benevolence to sympathize, but not enough to weaken the feelings when severity is required. The faculty of Amativeness is necessary to *comprehend* the nature of the opposite sex; Love of Young also, that he may inspire children with love and confidence.

The sense of Weight should be a strong one, for the muscular sense is dependent upon its power in order to *gauge* the amount of force to be used in handling instruments and in bandaging wounds, limbs, etc. Executiveness is required to assist authority and give resistance. Self-will is another ally most necessary, as well as Analysis, Time, Order, and Reason. A fair share of musical ability is required to assist the ear in making examinations of the heart and lungs, and in auscultation for various other purposes. If to these faculties one adds large Intuition, he has a fine bodily and mental equipment for the practice of surgery.

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